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CAPITAL FORMATION AND DEVELOPMENT FINANCE IN MONTANA

Submitted to:

GOVERNORS OFFICE OF BUDGET
AND PROGRAM PLANNING
CAPITOL STATION
HELENA, MT.

Submitted by:

WESTERN ANALYSIS, INC.
P.O. BOX 287
HELENA, MT.

JUNE 1980

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1 INTRODUCTION

1.0 THE ROLE OF CAPITAL

Without buildings, equipment and inventory, the means of production known as capital, economic activity would not take place. The accumulation of capital and subsequent investment in for-profit businesses is crucial to the process of economic growth. However, capital is only one of the several ingredients necessary to the establishment or expansion of business. A viable market for the product must exist, land and raw materials must be available at competitive costs, local labor must be in sufficient supply and have the required skills, and competent management is necessary to run the business.

It is important that the relative significance of capital be understood. The availabilty of funds will not, by itself, create economic activity. All of the other above ingredients must be in adequate supply, at reasonable prices. On the other hand, the wrong kind of money--debt instead of equity, or short-term debt instead of long-term debt--may jeopardize an otherwise feasible proposition, and the lack of capital can keep promising businesses from getting off the ground.

Clearly, there are more powerful forces than capital at work in determining the location and rate of economic growth. Basically, a local demand for capital depends on whether the area represents an attractive place to invest,

given its market conditions and other production costs. Business firms and entrepreneurs, in deciding where to invest, respond not only to shifts in the location of markets for their products, but also to changes in the costs and availability of the capital, labor and land they need for production. In addition, the recent migratory movements of people to rural areas and the sunbelt have to a large degree led job movements. Previously remote, small and medium-sized cities of the South and West have become more suitable as sites for starting up new industries and firms.

The proximity to existing and future markets is the dominant consideration in location decisions for most firms. More important, large national corporations rarely have to concern themselves with capital availability or cost, except during that period in business cycles when interest rates are peaking and conventional sources of funds have become tight. Finally, for all firms annual capital costs (depreciation, interest and often tax profits) are generally only about ten percent of the total value of sales [1]. Interregional differences in the cost of capital are even less significant, about one-half of one percent according to several recent studies [2, 3].

Basically, a local demand for capital is the major factor in generating investment and employment growth, not

relative advantages in the supply of capital. Recent shifts in business investment from the Northeast to the South have been due largely to lower costs of production, not the relative attractiveness of the supply of capital in the South. But simply because capital does not lead the way does not mean that well-functioning capital markets are not a critical enabling factor in state economic development. Opportunities for employment and income growth may go unrealized when capital markets fail to channel funds to those enterprises that could productively use them.

1.1 SMALL BUSINESS AND JOB GENERATION

More often than not those firms which suffer from imperfections in capital markets are small enterprises, employing fewer than twenty people, not the large national manfacturing firm which has a fairly secure source of expansion capital. Most important, in both Montana and the nation it is the small firms which contribute crucially to new job creation. In Montana, nearly 75 percent of private employment is found in firms with fewer than 50 workers (see Table 1.1). Over 60 percent of the 1970-1976 growth in private employment occurred in firms of this size (see Table 1.2)[4].

TABLE 1.1

BUSINESS SIZE COMPARISON

(Private Wage and Salary Employment*)

1977

Business Size (employees)	Percent of Total Establishments	Percent of Total Employment
1-4	63.0%	16.8%
5-9	18.3%	13.3%
10-19	10.7%	16.2%
20-49	5.7%	20.4%
50-99	1.4%	8.8%
100-249	0.6%	10.2%
250-499	0.1%	3.5%
500-999	0.1%	3.0%
1000	0.1%	7.8%
	100.0%	100.0%

Sources: Western Analysis, Inc., Helena, Montana.

Derived from County Business Patterns, Montana summary, United States Department of Commerce, Bureau of the Census, 1976.

202 and 790 employment series, Research and Analysis Section, Montana Department of Labor and Industry, 1977.

Note: Excludes agriculture, government, and non-farm proprietors

TABLE 1.2

PRIVATE NON-AGRICULTURAL
EMPLOYMENT GROWTH BY SIZE OF ESTABLISHMENT

(1970-1976)

Number of Employees Per Establishment	Percent of Statewide Employment Growth (1970-1976)
1-19	43.0%
20-49	19.5%
50-99	7.6%
100-249	17.0%
250	12.9%
	100.0%

Source: Western Analysis, Inc., Helena, Montana.

Derived from County Business Patterns, Montana summary, United States Department of Commerce, Bureau of the Census, 1970 and 1976.

202 and 790 employment series, Research and Analysis Section, Montana Department of Labor and Industry, 1970 and 1976.

The significance of small firms for employment growth nationally is equally as important. Their ability to add new jobs has increased relative to large businesses. Total jobs in businesses employing less than 100 people increased 13.2 percent between 1967-1972, compared with 8.9 percent for businesses employing over 1000 workers. A decade earlier large firms grew three times as fast as small firms. (See Table 1.3).

TABLE 1.3

NATIONAL RATE OF EMPLOYMENT GROWTH BY SIZE OF BUSINESS
SELECTED YEARS

Year	Total Employment Rate of Growth(%)	Small Business[1] Employment Rate of Growth(%)	Medium Business[2] Employment Rate of Growth(%)	Large Business[3] Employment Rate of Growth(%)
1958-1963	7.8	3.9	1.7	13.7
1963-1967	25.8	25.6	23.7	26.2
1967-1972	9.3	13.2	1.4	8.9

1. Defined as businesses employing 1-99 employees.
2. Defined as businesses employing 100-999 employees.
3. Defined as businesses employing over 1,000 employees.

Source: NFIB Factbook on Small Business, 1979

A more detailed analysis of the contribution to employment growth made by firms of different kinds has been completed by David Birch at the Massachusetts Institute of

Technology [5]. He states that all parts of the country are losing jobs at about the same rate, eight percent per year. Replacing these lost jobs with new ones, through either the birth of new establishments or expansion of existing ones, is the principal factor in determining whether an area is growing or declining.

Between 1969 and 1976 independent (single-establishment) firms played the dominant role in providing new jobs due to expansion, when compared with branch plants. The importance of capital availability to new jobs is underscored since it is precisly the independents who are most susceptible to capital market imperfections. Jobs generated by births of new establishments are more likely to be in branch plants than in independent companies, although in the West region the percentages contributed by each category are similar (see Table 1.4).

Of all new jobs generated between 1974 and 1976, at least 75 percent were created by firms less than 4 years old. Again, it is the young businesses which are less able to rely on conventional capital markets for their financing.

Finally, small companies, those with less than twenty employees, contributed 66 percent of net new jobs in the U.S. between 1969-1976. Over half of the new jobs were in small, independent businesses (see Table 1.5).

TABLE 1.4

STATUS OF FIRMS VS EMPLOYMENT GAINS BY REGION
(Selected Years)

BIRTHS
Percent Employment Gains In Firms That Are:

	Time Period	Independent	Head-quarters	Subsidiary	Branch Head-quarters In-State	Branch Headquarters Out-of-State
Northeast	1969-72	39.0	6.1	5.2	20.3	29.5
	1972-74	35.6	4.1	3.9	21.4	34.9
	1974-76	23.6	2.0	1.4	31.9	41.1
North Central	1969-72	39.7	6.3	3.5	16.0	34.5
	1972-74	30.3	3.5	2.5	20.4	43.3
	1974-76	19.9	1.4	1.1	33.1	44.5
South	1969-72	37.1	5.5	4.6	12.8	39.9
	1972-74	36.2	3.9	3.0	13.9	43.1
	1974-76	25.2	1.6	1.4	21.1	50.6
West	1969-72	40.3	5.5	4.1	20.8	29.4
	1972-74	44.0	4.0	2.5	21.5	28.0
	1974-76	24.0	1.7	1.1	31.6	41.6

EXPANSIONS
Percent Employment Gains In Firms That Are:

	Time Period	Independent	Head-quarters	Subsidiary	Branch Head-quarters In-State	Branch Headquarters Out-of-State
Northeast	1969-72	63.1	16.5	4.2	4.4	11.7
	1972-74	56.2	20.2	5.8	5.7	12.0
	1974-76	58.2	21.1	6.7	4.2	9.8
North Central	1969-72	58.3	15.2	3.0	8.1	15.4
	1972-74	55.4	20.7	4.6	6.0	13.2
	1974-76	54.5	20.9	5.0	6.3	13.3
South	1969-72	59.2	13.3	4.8	4.2	18.5
	1972-74	56.0	15.9	5.0	3.7	19.3
	1974-76	54.2	17.4	5.7	4.6	18.1
West	1969-72	60.3	15.6	3.1	7.5	13.3
	1972-74	58.2	21.0	3.7	6.0	11.0
	1974-76	56.9	22.2	4.6	5.3	11.0

Source: Birch, D., The Job Generation Process, MIT Program on Neighborhood and Regional Change, 1979.

TABLE 1.5

NET NEW JOB CREATION BY SIZE AND ADMINISTRATIVE STATUS

Status	Employment Size 0-20	21-500	51-100	101-500	501+	TOTALS
Independent	51.8	4.4	0.0	-1.5	3.1	57.8
Headquarters/ Branch	11.9	4.9	3.1	5.6	10.6	36.1
Par/ Subsidiary	2.3	1.9	1.3	1.1	-0.5	6.1
Totals	66.0	11.2	4.3	5.2	13.3	100.0

Source: Birch, D., The Job Generation Process, MIT Program On Neighborhood and Regional Change, 1979.

However, this figure should be interpreted cautiously since the trade and service sectors contributed 88 percent of the total U.S. employment gain between 1960-1976, and small businesses are more dominant in these sectors than in manufacturing, for example. In other words, employment gains apparently due to small business are largely a result of simply trade and service sector growth.

In Montana, remoteness has often been cited as one of our most precious assets. However, it also works to our disadvantage since national markets are distant and transportation costs high. Also, our labor supplies are relatively sparce when compared with national norms. Simply put, with the exception of extractive industries we are at a severe competitive disadvantage with other regions when trying to attract the one percent of national manufacturing

firms which expand existing operations or establish new plants each year. The Montana Screening Matrix, a report completed by WAI in 1979, concluded that our competitive edge in manufacturing lies in relatively small, footloose industries having low transportation costs, low energy use, growing national markets, and high value added. It is precisely these new, small, independent operations that are confronted daily with the imperfections of capital markets.

1.2 RECENT INTEREST IN CAPITAL ISSUES

Realizing that our long-term economic outlook is to a large degree dependent on the success, or failure, of local entrepreneurs, the availability of capital and capital formation are subjects frequently brought up in discussions concerning the state's economy. There are basically two opposing viewpoints. First, some claim that capital markets operate efficiently and that the tendency for interregional equalibrium in capital flows will make capital available where it is needed. The other perspective is that imperfect information, excessive transportation costs, banks' attitudes towards risk, degree of competition among banks, and amount. of local bank assets may create capital "gaps" in the availability of funds for certain types of loans.

Additionally, capital, like any other mobile economic resource, will tend to move to areas where the risk/return ratio is the most promising, thus principally to out-of-state markets.

Although the debate over capital shortages continues, both the public and private sectors in Montana have recognized that capital is a key economic resource, and that its availability is necessary to balanced economic growth. The Montana Chamber of Commerce has a Venture Capital Sub-Committee which is investigating the potential for using state funds to establish a venture capital fund administered by the Development Credit Corporation of Montana. The Montana Bankers Association Investment Committee has expressed interest in conducting a study on the comparative economic advantages of investing state funds in-state vs. out-of-state. The Governor's Office of Commerce and Small Business Development has consistently argued that small firms in Montana are facing difficulties in raising needed equity capital. The Northern Rockies Action Group is actively soliciting grant funds to conduct a comprehensive research study on alternative investment strategies for public funds. The 1979 Montana Public Investment Plan cited the issue of capital shortages and recommended that, if needed, innovative methods of alleviating these be investi-

gated [6]. The Coal Tax Oversight Subcommittee recently invited Mr. Belden Daniels, a recognized authority on capital and the development process, to address the committee on long-term investments of mineral resource tax revenues. The 1977 Legislature directed the Coal Tax Oversight Subcommittee to conduct an interim study of the feasibility of using state trust funds to promote housing and other investments. As a result of the study, bills were introduced in the 1979 Legislature to create a Montana Product Development Corporation and a Homestead Loan Program, ostensibly to augment shortages of venture capital and reduce the cost of farm loans [7].

1.3 PURPOSE AND APPROACH

This project is being completed in two phases. Phase I consists of background research and recommendations concerning the form and functions of alternative mechanisms for stimulating the in-state supply of capital. Phase II contains the economic and fiscal analysis of the various recommendations made during Phase I, as modified by subsequent review and comment.

Specifically, the purposes are as follows:

PHASE I

--Investigate the availability of debt and equity capital for Montana businesses.

--Provide descriptions of selected state development finance options in use elsewhere.

--Recommend several alternative mechanisms the state of Montana may employ to increase the supply and availability of capital to Montana businesses.

PHASE II

--Where necessary, modify the above recommendations based upon outside review and comment.

--Assess the fiscal and economic impacts of the alternatives recommended above.

Because of the lack of generally accepted reserach procedures for a project of this nature, we essentially started from scratch. First, we interveiwed various representatives of the banking community and discussed their perceptions of the capital availability issue and the need for state involvement in this area. We also met with state officials knowledgeable about banking and those familiar with the investment function of state government. During the course of the project we found it necessary to continue

to discuss with people both in and out of government various functions of capital markets, interpretations of data and perspectives on the feasibility of various approaches to the problem.

Fortunately, several useful documents have been put together on various aspects of this issue. We reviewed a rather thorough analysis of the overall subject contained in two volumes recently published by the Council of State Planning Agencies [8, 9]. The Center for Community Economic Development also reviewed state community development finance programs and published a report of their findings [10]. Oil development in Alaska, and the consequent massive infusion of revenues into that state's coffers, caused the Alaska legislature to conduct several studies on means of promoting economic development through alternative investment strategies of these funds [11, 12].

Other states' studies on the economic impact of in-state vs. out-of-state investment of public monies were reviewed [13, 14] as were academic treatments of the general functioning of capital markets [2, 15].

Data on the capital markets and flow of funds is quite sketchy. Aggregate loan, asset, etc., data is available by banks and states but this data tells little about whether an unmet need for capital exists. Another limitation on its

usefulness is that it is available at only one or two points during the year, thus revealing little about aggregate positions. Some generalizations can be inferred about relative levels of loan activity, but again this is very limited since loans made and sold on the secondary market aren't shown. Thus, loan figures shown for banks which have sold many loans will understate their level of activity in their community. Also, available data say nothing substantive about net flows of capital in or out of a region.

Limited surveys were done in order to gather some first hand impressions of the adequacy of capital markets in Montana. Selected small manufacturing businesses were asked about their access to needed financing and banks were surveyed regarding their ability to meet the financial needs of businesses in their communities. (Also, phone conversations were held with venture capitalists in the west to discuss their impressions of the financial problems of small businesses and recommendations for how to alleviate them.)

Finally, annual reports and literature on selected state programs were reviewed. The state and programs chosen for review, Pennsylvania, Alaska, California, Connecticut, Massachusetts, and Maine are representative of the most current and innovative development finance programs in the country. More important, most of these programs have been cited by other analysts as efficient and workable.

FOOTNOTES

Chapter 1

[1] U.S. Internal Revenue Service, Statistics of Income, Corporation Income Tax Returns, Annual.

[2] Straszheim, M., "An Introduction and Overview of Regional Money Capital Markets," Economic Development Administration, Department of Commerce, 1969.

[3] Birch, D., "Regional Differences in Factor Costs: Labor, Land, Capital and Transportation," 1977.

[4] Western Analysis, Small Business in Montana, Montana Small Business Association, August, 1979.

[5] Birch, D., The Job Generation Process, MIT Program on Neighborhood and Regional Change, 1979.

[6] Western Analysis, Montana Public Investment Planning Process,1979 Annual Report, State Coordinator for the Old West Regional Commission, 1980.

[7] Montana Legislative Council, Report of the Coal Tax Oversight Committee, November, 1978.

[8] Litvak, L. and Daniels, B., Innovations in Development Finance, Council of State Planning Agencies, 1979.

[9] Kieschnick, M., Venture Capital and Urban Devlopment, Council of State Planning Agencies, 1979.

[10] Sussman, C. and Klein, S., Community Economic Development and The States, Center for Community Economic Development, 1978.

[11] Goldsmith, S., The Permanent Fund and the Growth of the Alaskan Economy: Selected Studies, University of Alaska, 1977.

[12] Daniels, B., Models and Options For the Alaska Permanent Fund: Functions, Regulations and Accountability, Harvard University, 1977.

[13] Becker, W., Does Minnesota Need A Local Government Pooled Investment Fund, Minnesota Bankers Assocation, 1978.

[14] Rutz, R., The Economic Effects of Idle Public Funds Policies: Theory and Evidence in Nebraska, University of Nebraska, 1976.

[15] Roman, J.T., Capital Exports and Growth Among U.S. Regions, Wesleyan University Press, 1965.

2 CAPITAL

2.0 CAPITAL AND ECONOMIC GROWTH

Capital, broadly defined as those goods devoted to the production of other goods, represents perhaps the single most important determinant of the shape and evolution of the American economy. Productivity gains, both human and hardware, have been to a large extent responsible for our nation's high standard of living. Economist Edward Denison's exhaustive study of the sources of economic growth in the United States (1929-1957) suggests that as much as forty percent of the total increase in income (per person employed) was a result of productivity advances. Later estimates by Denison and the Brookings Institution over a different period of time (1948-76) confirm the importance of capital and its impact on income growth [1]. Estimates by Western Analysis covering the period (1960-1979) imply that approximately 35 percent of the real income gain was associated with increasing output efficiency. This particular model also dramatizes the effect of short-term productivity change on inflation rates; the number one economic problem of the day, a problem directly related to declining productivity growth. Over two thirds of the year

to year change in the consumer price index can be explained by fluctuations in productivity growth [2].

Growth of American productivity was rapid, by historical standards, during most of the postwar period. But in the last half of the 1960's the rate began to slacken. Until 1974 this slackening was not particularly disturbing from the standpoint of long-term growth. Beginning in 1974 the situation became disturbing and also puzzling. The productivity trend turned far more adverse, and the influences responsible for the slowdown prior to 1974 were no longer sufficient to explain the shortfall from the earlier trend. The major productivity series--output per person employed, output per hour, and output per unit of input--all show much the same pattern of retardation.

The trend rate of productivity growth in other major industrial countries, has also been declining in recent years. In the United States, however, this decline started earlier and has lasted longer than in other industrial economies. Table 2.1, which compares growth in output per worker for the major OECD countries, makes it evident that declines have occurred in all countries.

Table 2.2 shows growth in output per hour in the United States since the end of World War II. During the first 20 years after the war, output per hour for all

TABLE 2.1
Annual Growth In GNP Per Employed Worker In Major Industrial Counties, 1963-79
(Percent change per year)

Country	1963 to 1973	1973 to 1979[1]
United States	1.9	0.1
Japan	8.7	3.4
Germany	4.6	3.2
France	4.6	2.7
United Kingdom	3.0	.3
Italy	5.4	1.6
Canada	2.4	.4

[1] Estimate.

Source: Organization for Economic Cooperation and Development.

TABLE 2.2
Labor Productivity Growth, 1948-79

(Percent change per year)

Sector	1948 to 1955	1955 to 1965	1973 to 1973	1978IV to 1979IV[1]	
Private business sector	2.5	2.4	1.6	0.8	-2.8
Nonfarm	2.4	2.5	1.6	.9	-2.2
Manufacturing	3.2	2.8	2.4	1.5	(2)
Nonmanufacturing	2.1	2.2	1.2	.5	(2)

[1] Preliminary
[2] Non available.

Note--Data relate to output per hour for all employees
Source: Department of Labor, Bureau of Labor Statistics

employees in the private nonfarm business sector rose at an average annual rate of just under 2½ percent. From 1965 to 1973 the increase was 1½ percent. Since 1973 the annual growth of productivity has been less than 1 percent.

There are several possible explanations for this relative decline. Charles Kindleberger, Ford Professor of Economics, points out that our industrial society may be maturing to a new state of development in which innovation is more subtle and perhaps crucial, further suggesting that productivity be measured by broader new standards [3]. Jerome Wiesner, President of MIT, suggests that the United States is beginning to drift toward a great emphasis on "replacement technology" rather than new ideas. He accredits this shift to shortages of capital and investment incentives as a result of counterproductive patent policies, growing government regulations and changes in research support. His premise appears to be born out by relative investment patterns over the last 15 years, i.e., fixed nonresidential investment, research and development, and new product investment as a percent of GNP have been declining. Wiesner goes on to say that this series of deterrents to the creation and use of new knowledge is "a social overhead (cost) which the nation cannot afford [3]."

A similar view is held by John W. Kendrick of George Washington University, who associates our decreasing productivity since the recession of the mid 1960's to seven major trends:

--"less intensive use of plant due to reduced demand for U.S. products;

--the addition of many unskilled workers (inexperienced women and young people) to the work force;

--inflation which rendered depreciation allowances inadequate;

--increasing "non-productive" expenses to meet new environmental and safety laws;

--the prevalence of antibusiness and anti-establishment attitudes;

--distortions due to wage/price controls;

--reduced expenditures on research and development.[3]"

Other explanations for declining productivity growth include rising energy prices, the increased age of the capital stock, increased government spending, lack of adequate business tax advantages on investment, (i.e., 1969 revision in capital gains), labor morale/poor management, increasing concentration in service and trade related jobs,

export of capital abroad often making foreign goods less expensive, and personal tax incentives to consume, not save [4]. All of these factors detract from capital formation, resulting in lower capital/labor ratios. "Since it is difficult to identify a single cause for the slowdown in productivity growth, the immediate prospects for a dramatic improvement in productivity are not good. Most recommendations for policies to improve productivity have been directed at incentives to increase investment in human and physical capital as well as in research and development. Since the slower growth of physical capital is responsible for only a part of the decline in productivity growth, efforts to stimulate busines fixed investment will not solve all our productivity problem. Still, improved investment performance is almost surely a necessary condition for higher productivity growth [5]."

Without increased investment, productivity gains cannot be realized; without savings there can be no investment. Within the context of allied nations, Americans spend far more and save far less than our international neighbors who, not just by coincidence, have higher productivity growth. Table 2.3 and Diagram 2.1 reveal this alarming propensity to emphasize the present by trading-off the future.

As can be seen from Diagram 2.1, variations in growth rates are strongly related to national savings and hence investment. Although only about 50 percent of the growth rate variation is explained by savings, the results can be significantly sharpened with the inclusion of other variables such as the income distribution and employment mix of the respective countries.

The issue of capital formation in the United States can be classified as nothing less than critical. As mentioned earlier, short-term variations in productivity to a large degree determine our current inflation problem. Conversely, to an equal degree our real savings rate explains our productivity problems. Personal per capita savings of $330.00 are too low to allow for needed capital formation.

TABLE 2.3

SAVINGS AS A PERCENT OF
TOTAL DISPOSABLE INCOME

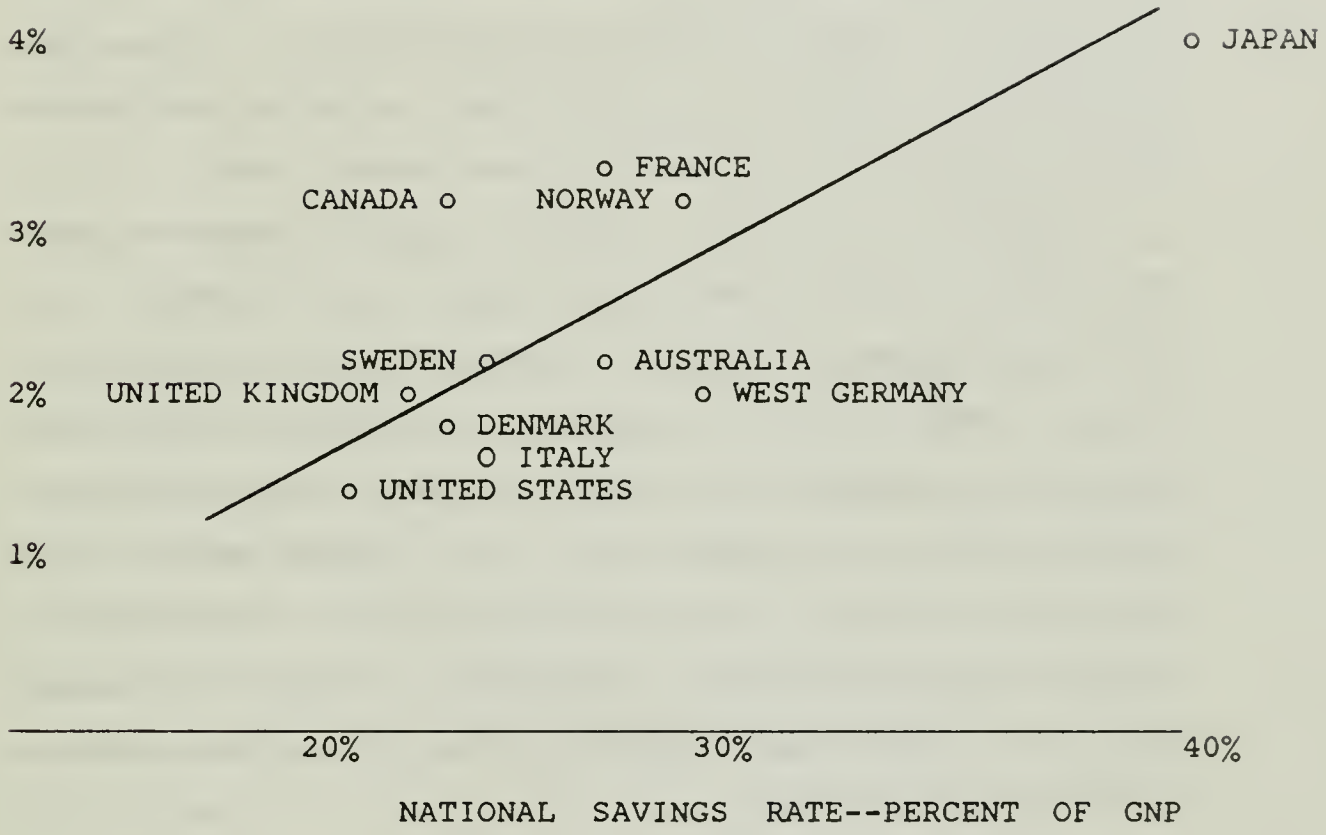
1978

United States	4.9%
France	17.2%
W. Germany	13.7%
Italy	23.1%
Netherlands	12.9%
United Kingdom	14.4%
Japan	21.2%
Canada	10.4%

United Nations Databook, 1979.

DIAGRAM 2.1

SAVINGS AND PRODUCTIVITY GROWTH



Source: World Bank (1970-1975)

2.1 CAPITAL SOURCES

Capital has a more specific meaning to the businessman. To him it means money; often somebody else's....a loan, a stock or bond issue, etc. It can take the form of a short-run operating note but generally represents a longer term investment in equipment or land, those factors of production more closely associated with the economists' view.

Non-farm, corporate, external capital financing takes the form of equity issue, bond issue, bank borrowing, commercial mortgages, and direct borrowing from other corporations (trade credit)*. About two-thirds of corporate external financing is borrowing on long term, and includes bonds, stocks, mortgages and, to a limited extent, bank borrowing. Equity and bond financing is conducted in markets largely national in character. Insurance companies and private and public pension funds are the major sources of funds for corporate bonds.

Short-term corporate financing is normally done by bank borrowing and trade credit. The credit standing of large

---

* Relatively little is known about trade credit. In the aggregate, net flow of funds due to trade credit are small. Trade credit is so closely related to the merchandising processes of particular commodities that it does not appear to exhibit important characteristics of other financial markets. There are some significant differences among sizes of firms, smaller firms being more dependent on their suppliers for their financing.

companies is likely to be widely known. Whereas it is easier for most borrowers to present their cases for a loan locally and most convenient for banks to review the credit worthiness of local borrowers, the cost of researching loans is less than proportional to size, so that large loans can be obtained in a much wider geographic market. In addition, large firms are usually served by larger banks, whose activities are more closely tied together by the many national markets in which they participate. Thus, as the size of the loan increases, the greater are the alternative sources of funds (both bank and non-bank sources), and hence the less likely that there will be regional differences in rates.

Unincorporated business also is financed by borrowing at commercial banks. It is not economical for small firms borrowing small amounts to register and float bond or stock issues very frequently. Moreover, smaller businesses cannot economically search as widely for bank loans as larger corporations.

During the initial phases of business formation sources of capital are generally of a personal nature. Of 69 new manufacturing firms recently surveyed in Buffalo, Cincinnati, Atlanta, and Salt Lake City, for the "average" new firm "personal savings accounted for 81.0 percent of the initial captal, identifiable bank loans 2.2 percent, other

loans (which include those from personal friends and undoubtedly some bank loans not identified as such by D&B) 13.4 percent, and other sources of capital--predominantly personal contributions of equipment (a form of personal savings or equity)--8.2 percent. In 75 percent of the cases, personal savings and equipment contributions accounted for all starting capital. In those cases with debt present, debt accounted for 62.2 percent of initial capital.

> "It is perhaps important to note sources of capital not mentioned as well as those mentioned. No mention was made of any organized venture capitalist--either as equity or debt investor. These figures indicate a total absence of start-up investments by venture capitalists in these four cities. Only one firm reported receiving a start-up loan from the Small Business Administration, although it is possible that some of the bank loans reported were guaranteed by SBA [6]."

Although "start-up" takes place outside the bounds of organized capital markets, the study revealed that those businesses (manufacturers) with initial debt appear to be excessively leveraged, and remain so. This pattern of reliance on personal or internal funds or heavy debt persists throughout the early years of the firm. Furthermore, the venture capital (retained earnings or individual saving) picture does not appear to be different for new service or commercial firms who also rely heavily on friends, family, personal savings, second mortgages, and life insurance policy loans.

Clearly, sufficient venture capital is necessary before any business can borrow money from conventional lending institutions. A sound equity position or borrowing base (value in excess of claims or liens against property) is one of the more important prerequisites of obtaining commercial bank financing; for big loans this is probably every bit as important as an established business record.

A growing company, one that has demonstrated that it can sustain itself by competing in the market, needs continual financing to foster growth. If fortunate, the firm can borrow enough capital, draw upon internally generated funds, sell out to a larger company or sell equity, i.e., ownership in the business. This option, however, may be one that many small business owners are reluctant to use particularly if the stockholders are not active business participants. The typical small businessman

> "is an independent creature who abhors regulations. He wants to be free to make his own decisions, unencumbered by government and shareholders. He does not want to bare his company's financial records to the whole world. Although Congress and the Securities Exchange Commission seem sincerely interested in relaxing the regulations and reducing the costs of going public, their efforts are of little value to the majority of small firms, which just aren't interested in diluting their independence.
>
> Investor interest in small business equities is understandably lukewarm, too. An equity interest in a small company is often difficult to liquidate at a fair price. With no dividends, no voice in

management, and no established market for exchange, the value of a minority equity may be only one rung higher than worthless. In what does a shareholder of a small business share? Though they may have officially "gone public," many such small companies are managed in exactly the same manner as when they were privately held [7]."

2.2 CAPITAL: A MINI-SURVEY

During the course of analyzing capital access in Montana, a questionnaire was mailed to each of the state's 158 banks to determine how bankers perceive the capital shortage issue. Their responses (120 banks responding) are shown below:

BANKERS QUESTIONNAIRE

1. Is procuring financing a major problem for existing (expansion) or prospective businesses in your community? 24% YES 76% NO

2. Are you satisfied with your bank's ability to make loans to qualified businesses? 83% YES 17% NO

If not, why? _____

_____

3. In your opinion, is there a capital shortage in your community? 38% YES, 62% NO.

Would your answer to this question have been different 18 months ago? 17/% YES 83% NO.

4. Have you had any business loan requests that you have had to turn down because of the nature of the loan (size and duration) and/or lack of your ability to find a buyer on the secondary market? 43% YES 57% NO.

If so, how often does this happen?_____

5. Have you had any business loan requests that you have had to turn down solely because the borrower did not have sufficient equity? 93% YES 7% NO.

If so, how often does this happen? (frequently).

The vast majority of bankers do not believe that there are any major problems in securing financing. On the basis of the open-ended questions (number 2, 4, and 5), if difficulties arise they are most likely the result of lack of experience (i.e., a new business), a perceived lack of competence or insufficient equity. These attitudes are summed up by a rural western Montana banker who states:

"There is not an unmet need for capital in many areas locally so far as business loans are concerned for eligible borrowers. There are numerous speculative ventures not eligible to conventional lenders which need private capital, not public tax funds. The ability to repay a loan is still of prime importance in any loan, but government agencies lend tax dollars and give only lip service to repayment ability. The lack of private capital in most instances has its solution in the tax structure itself. If we reduce the size of government and cut out some government agencies, thereby cutting taxes, we will eventually solve the private capital problem; but if we create another goverment agency ostensibly to solve any particular problem, it simply exacerbates the problem.

If a business borrower is not eligible for a loan with conventional lender, then he is certainly not eligible for tax-dollar lending."

In order to assess the perceptions of private businesses a second survey was conducted. Thirty-five small manufacturing firms selected by the Goveror's Office of Commerce and Small Business Development were mailed the following questionnaire. The response rate was also very low; only 16 firms returned the form. As a result the findings should be viewed with discretion.

Business Survey Questionnaire

1. Please rank the following items according to whether they are a problems for your business.

(1 = serious problem, 8 = little or no problem)

AREA	RANK
Labor costs and quality	7
Energy costs	5
Taxation	4
Capital availability	2
Inflation	1
Management technical assistance	8
Transportation	6
Marketing and sales	3

Answer the following only if you ranked Capital Availability in one of your top four problems:

2. Have you needed financing in the last 12 months?

100% YES _____ NO

If YES, for:

	YES	NO
Working capital	100%	_____
Plant exansion	45%	_____
Equipment	91%	_____
Land	36%	_____
Other	18%	_____

3. What type of financing have you been seeking?

A. Amount	Check One
0 - $50,000	
$50,000 - $200,000	17%
$200,000 - $700,000	75%
Over $700,000	8%

B. Duration	
1 - 5 years	18%
5 - 10 years	45%
10 - 20 years	36%
Over 20 years	

4. Were you able to obtain the loan amount you were seeking? 73% YES, 27% NO.

5. Were you able to obtain the loan terms you were seeking? 45% YES 55% NO.

6. In your opinion, has your banker been responsive and tried to meet your needs? 91% YES 9% NO.

7. If your answer to either 4 or 5 was no, please briefly explain the reasons your lender gave for not meeting your terms. _____

_____

_____

8. Is demand for your output sufficient to enable your business to expand, if financing were available? 90% YES 10% NO

9. Is the lack of equity capital for leveraging loans a major constraint to your expanding your business today? 91% YES 9% NO

The majority of the Montana firms surveyed tended to rank capital availability as one of their more important business problems. Inflation was ranked highest and management problems lowest; a pattern which has been consistent with a variety of national surveys [8]. National survey results, however, are dependent on current economic conditions. The National Federation of Independent Business prepares a quarterly survey asking its members to rank their problems by order of importance. The results of the survey

have varied over time, with taxes and inflation normally dominating the list. During the 1974 oil embargo, for example, fuel and material shortages ranked very high. By contrast, interest rates and financing tend to become more important during cyclical credit crunches. Even during the depths of the last recession, an inadequate demand for product was not ranked as an important problem by most firms. Government regulation seemed to take on greater importance during the last recession, becoming even more important than inadequate demand.

A similar study by Stahrl Edmunds also ranked capital availability as a major small business issue. Table 2.4 provides the results of this investigation. Interestingly, management problems are ranked low even though over 90 percent of business failures are related to management weakness." While capital availability no doubt contributes to failure, it is not a dominant issue [9]. Without a good market and good management, money does not matter; at least to the degree that it cannot make a bad deal better.

TABLE 2.4

ECONOMIC PROBLEMS OF SMALL BUSINESS AS IDENTIFIED BY 183 WITNESSES BEFORE THE SELECT COMMITTEE ON SMALL BUSINESS, U.S. SENATE, 1975

Major Small Business Problems	Precent	
	All Witnesses N = 183	Less Those Citing Government Regulation N = 127
Government regulation and paperwork burden	30	---
Taxation (capital accumulation and estate)	24	35
Inflation	6	8
Government contract problems	1	1
Government intervention subtotal	61	44
Capital availability	12	17
Competition	10	14
Management technical assistance	5	8
Information and research	3	4
Labor rates, problems and shortages	5	7
Energy	4	6
Total	100	100

Source: Edmunds (1979)

Returning to the Montana business survey, all firms indicated that they had required conventional financing within the past year. Most of them (about 70%) were successful in their attempts to obtain the loan amount that they were seeking, however, only half received the desired terms. Like the banks, nearly all the firms cited lack of equity as a major bottleneck to business expansion. Additionally, these firms were not generally "new" business and all seem to have an established business track record, i.e., they have survived the critical first few years when approximately 50 percent of all businesses fail each year [10].

2.3 CAPITAL FLOWS

Montana's employment and population growth has for the last decade consistently outpaced the national rate of increase. This growth differential is also reflected by Montana's financial picture. Table 2.5 reveals that assets, deposits and loans have grown significantly faster in Montana than at the national level. Apparently, Montanans also tend to save more (or conversely spend less) relative to their income; saving approximately 20 percent more than

TABLE 2.5

SELECTED FINANCIAL STATISTICS
(1974-78)

	Montana	United States
Increase in Assets	48.9%	39.5%
Increase in Deposits	51.1%	36.1%
Increase in Commercial Loans	78.1%	21.1%
Increase in Real Estate Loans	77.3%	62.8%
Increase in Government Securities	38.8%	38.3%
Increase in Income	47.8%	48.0%
Deposits Per Capita	$4306	$3962
Loans Per Capita	$2939	$2793
Income Per Capita	$5794	$6542
Interest Rate (Lending)	9.12%	8.87%
Interest Rate (Savings)	5.62%	5.48%
Loans & Securities/Assets	.562	.562
Securities/Assets	.263	.228
Loans/Assets	.300	.334
Commercial Loans/Assets	.142	.182
Loan Mix-Percent Commercial	47.1%	54.5%
Loans/Deposits	.339	.410
Population Growth (1971-79)	12.8%	8.0%
Employment Growth (1979-79)	34.4%	23.3%
Manufacturing Capital Expenditures (1970-76)	102%	83%

Source: U.S. Federal Deposit Insurance Corporation
Assets and Liabilities: Commercial and Mutual Savings Banks
U.S. Bureau of Census
U.S. Bureau of Labor Statistics
U.S. Department of Commerce

their national counterparts. Montana's interest rates are, however, ¼ point higher and our loan to asset ratio somewhat lower than the U.S. average. Also, Montana banks tend to hold more government securities relative to their asset base.

A recent investigation by Western Analysis (see Table 2.6) of variations in financial parameters between states revealed the following tendencies:

- The loan to asset ratio is inversely associated with the number of banks and the population level.

- The loan to asset ratio is inversely related to interest rates paid on savings accounts and positively related to interest charged by banks.

- The loan to asset ratio is inversely related to agricultural concentration.

- When using net flow of federal funds as a proxy for capital movements, capital appears to flow toward areas which have high population, but are not "fast" growth states. This flow, however, pertains only to government securities which are traded in large financial centers... New York, Chicago, etc. In the case of Montana such flows are nearly always net out.

TABLE 2.6

STATE CORRELATION MATRIX (r)*
1977

Variable	Loan to Asset Ratio	Net Flow**	Security to Asset Ratio	Interest Received
Loan to Assets Ratio			-.34	.31
Security to Asest Ratio		-.30		-.40
Number of Banks	-.37			-.34
Population		+.63		
Population Change		-.29		.67
Farm Income as a Percent of Total	-.37			-.38
Per Capita Income				.28
Employment Change		-.39		.60
Unemployment	+.37	+.27		.28
Net Flow**			-.30	
Interest Received (Loan Rate)	+.31		-.40	
Interest Charged (Savings Account Rate)	-.40		+.31	-.30

* Note: Correlation coefficients are significant at .05 level.
**Note: Federal funds purchased and securities sold less federal funds sold and securities purchased.

Sources: Bureau of Economic Analysis, U.S. Department of Commerce
Bureau of the Census, U.S. Department of Commerce
Bureau of Labor Statistics, U.S. Department of Labor
U.S. Federal Deposit Insurance Corporation

o The government securities to assets ratio is inversely related to interest charged by banks.

o Interest charged by banks is higher in fast growth states but lower in agricultural areas.

While there is little disagreement among economists that the availability of capital is a necessary ingredient for sustained economic growth, the debate over the efficiency of the market is much more difficult to resolve. Classical economic theory is built on the assumption of perfect capital markets which implies that capital flows freely among regions, and therefore is readily available for "acceptable" investment opportunities. This line of reasoning concludes that if the demand for capital exists in a region, and <u>if</u> that demand would result in an <u>acceptable</u> rate of return, then capital would flow freely and hence not be a constraint or impediment to economic growth.

Thomas Romans of Wesleyan University supports the proposition that regional differences in the price and availability of capital are extremely small. As a good first approximation, the assumption of perfect capital markets employed in modeling long-run regional growth is probably reasonable. More critical variables in analyzing

long-run regional growth appear to be labor migration, the rate of technological change, and the level of public investment and provision of public services--the very variables upon which regional economic theory has concentrated. Particular attention should be directed at differences between black and white wages and interregional migration. Compared to these variables, regional capital market differences appear slight.

Thus regional economic growth rates do appear dependent upon the net importation of capital from other regions, i.e., upon net foreign disinvestment. However, although interregional capital flows affect the growth rates of regions, they do not appear to be the most important variable promoting the convergence of per capita income differentials between regions. Here intraregional, intersectoral shifts of resources, particularly from agricultural to non-agricultural employment, appear to be more significant [11].

It is important to note that in the classical model there are essentially two major determinants of capital movements in or out of a region. One is the relationship between the distribution of owners of wealth* in the various regions. It is stated that the concentration of wealth owners is highly correlated with per capita incomes, and

---

* defined as amount of personal income attributable to property held.

regions with high per capita incomes generally have an excess of savings over investment, hence export capital out of the region to regions which will tend to import capital. Second, capital will tend to flow toward regions which are growing faster, under the assumption that these regions will have higher marginal rates of return on capital, a tendency largely supported by Roman's empirical results. He goes on to say

> "states with high property income shares tend to be net exporters, both because of a high export of capital services (income on foreign investment) and because of continuing "new" exports of capital from domestically employed resources. They do not appear to be net exporters because of their high incomes per se. High-income states tend to have a high demand for investment capital, but they generate more than sufficient savings to finance this investment [11]."

Other analysts support this position and argue that...

> "By any reasonable standard, the capital market in the United States is almost a perfect one, so that the above-mentioned regional flows are quite consistent with equalization of marginal rates of return on investment. Nevertheless, differentials in interest rates do not appear among regions. While small, they suggest the directions in which capital is moving. Yield differentials on marketable residential mortgages indicate higher yields in the West and South. The same differentials appear in interest charges for commercial bank loans [12]."

It should be noted, nevertheless, that there have been few attempts to measure or analyze the regional structure of money capital markets and interregional capital flows. The

belief seems widespread that capital markets in the United States are so extensively developed and so close to "perfect" on a nationwide basis that regional variation in interest rates (for otherwise comparable lending opportunities) is empirically insignificant.

The most significant restraint on interregional capital mobility is information costs. For a wide range of savers and borrowers, it is most economical to deposit or obtain funds from lending institutions located nearby. However, several factors facilitate interregional capital flows: the existence of secondary markets in a number of important credit instruments, methods to pool and share lending and borrowing opportunities regionally, and the extensive participation of "local" lending institutions and financial intermediaries in national money markets. Unfortunately, the complexity of capital markets and the considerable variation in the extent to which actors on both the borrowing and lending side participate in "local" versus national markets make "regional" limits on capital markets difficult to define. Delineating the character of financial transactions requires several dimensions--risk, time duration of the transaction, and negotiability of the resultant credit instrument. There are insufficient data on interest rates for particular kinds of transactions in different

regions to measure regional differences directly. Non-price rationing also exists in some parts of the capital market, though it seems unlikely that it varies significantly [13].

In spite of these problems economist Mahlon Straszheim supports the proposition that

> "The trend in the development of financial markets is away from regional or spatial compartmentalization and toward national homogeneity. The number of financial markets wich are primarily national in character continues to increase, as does the proportion of the total flow of investment funds which they represent. Institutional restrictions on interregional transfers (for example, geographic limits on thrift institutions' opportunities to finance mortgages) are continually being relaxed.... Despite sketchy data, the extent of current regional capital market imperfection can be approximated. Corporate stocks and bonds and government securities are all traded in national markets, with essentially equal access. Large commercial mortgages fall in much the same category. Significant regional differences exist in the markets for 1-4 family mortgages, consumer credit, and bank business loans of small denomination. As noted, the interest rate differentials range up to 3/4 percent on 1-4 family home mortgages among about a dozen broad regions of the United States. The differentials for smaller and medium-size commercial bank loans range up to 50-75 basis points across regions of such size. For consumer credit the differences may be higher. These three components of the capital market comprised about 45 percent of total real investment. Thus, a relatively small portion of the total capital market, about one-sixth, is subject to significant regional variation, exhibiting regional differences in price on the order of 10 percent [13]."

Most analysts of regional variations in interest rates conclude that observed differentials are caused by regional

variation in mortgage quality, usury law, and information barriers [14, 15]. Recent innovations in the secondary mortgage market (GNMA, FNMA, SBA, etc.) help reduce the differentials, but they still do exist. Yields are the lowest in the Northeast, higher in the North Central, higher still in the South and highest in the West; a pattern which has existed for years. This suggests the need for further refinement of the secondary market.

Rate differences may also be a function of demand conditions necessary to induce the flow of funds needed for optimal geographic allocation of resources. (This position is also supported by Table 2.6) The recent review by Peterson and Longbrake also suggests that policies designed to improve bank performance through their impact on local market structure branching laws, regulatory structure and institutions' operating efficiency, while perhaps desirable for other reasons, are unlikely to be successful in reducing inter-regional variations in mortgage yields. On the other hand, removal of usury law ceilings would be expected to reduce regional rate differentials and to improve the geographic allocation of funds. This would imply that rates in some areas would go up, but so should the availability of funds. The resolution of this issue involves a trade-off between allocational efficiency and issues of distribution

of income, consumer protection, and political considerations.

The indirect results are that mortgage loan yield differentials remain after controlling for a large number of factors. This finding, it was argued, is consistent with the existence of imperfections and inefficiencies in interregional secondary mortgage markets and, by the process of elimination, points to improvements in secondary markets as a policy objective [15].

Other researchers, such as Scott Goldsmith at the University of Alaska, contend that in addition to the usury laws, risk also restricts the free flow of capital. Risk increases with distance from the source of capital, since less is known of places farther away. For both of these reasons, Alaska has difficulty in attracting needed capital. He goes on to say that the usury law which prevented local rates from rising to the required level were blamed for the capital shortage problem; Alaskan investment traditionally needed to pay 1-2 percent above Seattle rates to make investments worthwhile. A period of tight money in the national money markets and interest rates which were inflexible upward prevented the needed flow of capital [16].

The Alaska experience has also pointed out some tendencies that perhaps exist in Montana. Goldsmith suggests

that higher interest in Alska may be the result of small, non-competitive banks, a position supported by the author. Goldsmith contends that the problem (interest rates) would have been worse had it not been for branch banks. Along similar lines, a recent study by the Minneapolis FRB concludes that

> "the number of banks and the number of people in Montana strongly suggest that the state has an unmet demand for banking services. Allowing banks to branch, then, would likely benefit consumers in Montana just as it has those in other states.
>
> "For its current population size, Montana has a relative small number of banking offices. Its two SMSAs--Billings and Great Falls--had 11 and 9 banks, respectively, in June 1978. Compared to other SMSAs with the same population size (50,000 to 100,000), this number of banks is about the same as for SMSAs in other unit banking states, but only half as large as for SMSAs in statewide branching states. Rural areas of Montana have the same disadvantage. Compared to South Dakota--a branching state that shares Montana's extremely low population density--Montana has fewer banking offices per town for seven out of nine population categories (Table 2.7)
>
> "Given the evidence on the impact of branch banking throughout most of the United States, and given the structure of banking in Montana, we conclude that allowing Montana banks the freedom to branch would be a boon to the customers they serve. We would expect the change to bring more offices and more conveniently located offices. We would also expect a wider variety of bank services to be offered throughout the state and especially in rural areas [17]."

TABLE 2.7

AVERAGE NUMBER OF BANK OFFICES
IN MONTANA AND SOUTH DAKOTA
RURAL COMMUNITIES

(1978-79*)

Population of Community	Montana (Unit Banking)	South Dakota (Statewide Branching)
Less than 500	.29	.51
500-999	.73	1.07
1,000-1,999	.93	1.26
2,000-2,999	1.90	1.63
3,000-4,999	1.82	1.67
5,000-7,499	1.40	1.67
7,500-9,999	1.25	4.00
10,000-14,999	3.50	5.80
15,000-24,999	4.33	---
25,000 and over	6.00	7.00

* Size of town is based on 1970 census. Number of bank offices is as of June 30, 1978, for banks and December 31, 1979, for branches.

Sources: U.S. Department of Commerce, Bureau of the Census
Federal Reserve Bank of Minneapolis
Federal Deposit Insurance Corporation

Although data are scarce, market imperfections may show up more at the substate level. Cross sectional comparisons of loan to asset ratios for Montana counties reveal that:

- Faster growing areas have higher loan to asset ratios.
- The loan to asset ratio does not seem to be related to industrial mix, i.e., concentration in agriculture.
- Farm communities do, however, have a higher ratio of securities to assets
- The smaller, more remote counties have a higher ratio of securities to assets

2.4 CAPITAL MARKET IMPERFECTIONS

To restate the traditional view, there is a "broad measure of agreement among economists that the mobility of capital can be explained by strictly economic factors and that the capital market works almost perfectly even in the space economy." The justification for this standpoint is that the costs of transporting capital flows over space are close to zero and that the capital market in a mature industrial economy is highly developed, knowledge of capital

sources and of investment opportunities is freely and readily available, and that the supply of capital is offered on a competitive basis to all parts of a country by predominantly national financial institutions. If these assumptions are correct, then capital should flow from low to high return regions tending towards an equilibrium in which regional rates of return to capital are equalized [18].

The classical approach to the availabilty of capital is not, however, without its detractors. One problem is that capital investment depends on both return and risk, and information. It has been stated that information in isolated areas of the country about sources of capital, and also information about investment opportunities in those more isolated areas, may simply be harder to come by than in the more populated, developed areas. Also risks may be perceived as being higher in the less populated, more rural areas, causing greater uncertainty and perhaps inhibiting the flow of capital to those areas. Also, lending officers may simply be more cautious about their investment decisions in more slowly growing, rural areas due to their lack of experience with new businesses. Other sources of regional imperfections in money markets may be the availability and cost of transmitting information and funds, market power exercised by borrowers and lenders, and the failure of

borrowers or lenders to respond to regional differences in interest rates.

According to Harry Richardson, noted regional economist, there are several reasons why the inter-regional market may be less than perfect. These problems include:

- Risks may be conceived as higher in poor regions, even if relative marginal rates of return were greater, on the grounds that the average return to capital had been lower in the past. Uncertainty can be explained not only in terms of imperfect knowledge about current investment opportunities but also by doubts about regional tax policies, the course of regional demand and other aspects of the future.

- Some investment projects may be so large that due to indivisibilities capital must flow in very large lumps or not at all. In such cases marginal adjustments in response to slight regional differences in rates of return will be impossible.

- Another consideration is that the savings-income ratio may be much higher in some regions than in others because of higher incomes, previously high growth rates and/or an above average concentration of property owners, and that this fact could be an important determinant of capital flows working independently of any forces making for an equilibrium allocation of resources.

- The most important argument of all against the notions of a perfect capital market and equilibrating capital flows in response to differentials in the rate of return is that they are based on a totally false conception of the nature of inter-regional capital flows and of how they take place in the real world. Most of the existing capital stock is immobile, being "locked" in equipment, machinery and infra-structure and is there-

fore tied to a particular location (this is in contrast to the existing labor force which is potentially mobile at all times). Thus, physical capital can be shifted only gradually and indirectly by the diversion of replacement investment.

- o A substantial proportion of inter-regional capital flows takes place within existing corporations. This reflects the importance of multi-plant firms in a modern industrialized economy. Its significance in this context is that such intra-firm transfers are carried out for reasons other than differentials in relative rates of return, particularly for reasons associated with policies of the individual firms.

- o Capital flows on government account--again a substantial share of the total--are totally unrelated to regional rates of return, but are determined by national infrastructure requirements or the demands of regional policy.

- o The most important inter-regional capital flows are those which are directly associated either with the establishment of a new plant or the relocation of an existing plant (or other business enterprise). In effect, this means that to this extent it is not a question of the spatial mobility of capital but of inter-regional location theory [18]."

A similar view is held by Lawrence Litvak and Belden Daniels. They argue that there is accumulating evidence of an abundance of capital market failures. Higher risk ventures go unfunded because of the absence of market mechanisms that could minimize risk to potential capital suppliers. Financial intermediaries do not have accurate or sufficient information about certain kinds of firms.

Steeper transaction costs for making and following some loans keep certain businesses out of the credit queue altogether. Some financial institutions with monopoly power raise funding barriers higher than they would be under competitive conditions. Suppliers of capital can be biased for reasons of sex, race or politics. And government regulation in capital markets creates unintended distortions.

According to Litvak and Daniels these capital market failures strike hard at independent, single-establishment firms, which generate over half of the new jobs in our economy. On the whole, these firms suffer from high debt/equity ratios, reflecting their difficulty in raising equity capital through either the public market or venture capitalists. Their debt financing differs from that of larger firms as well: it is shorter in term, and when long-term, it is more often supplied by banks than private sources [19].

One problem which Litvak and Daniels mention may be particularly important in rural areas of Montana. Bank concentration and lack of branching (mentioned earlier) may restrict credit. "Generally, small and young corporations find themselves restricted to local banking markets. For example, firms with total assets of $1 million or less receive about 90 percent of their loans from banks in the same SMSA. Unfortunately, local banking markets tend to be

characterized by a high degree of concentration. In some states, such as Georgia, Arkansas, Montana and Kentucky, approximately one-half of all counties have only one or two banks. The fact that market concentration affects the risk-taking behavior of banks has been confirmed in a number of studies. Gardner, in a study of St. Louis (1973), and Heggestad, in a comparative analysis of several metropolitan areas (1977), have both found credit rationing to take place in a way which lowers the risk to the bank, rather than raising the return. These studies in urban areas are supported by similar studies in isolated rural banking markets by Fraser and Rose (1971), Chandross (1971) and McCall and Peterson (1977). They all found that the entry of a new bank into a county with few banks resulted in dramatic changes in the existing banks' portfolios."

There have been a number of studies examining the cost and availability of capital to small firms. The most recent empirical study, by Kieschnick and Daniels (1978), reviewed previous studies and reported on new research based on the FTC Quarterly Financial Reports. The conclusion of the study was relatively straightforward: for manufacturing firms below $1 million in assets, there exists a major discrepancy between profitability and the existence of barriers to obtaining long-term debt and equity. This

result is consistent with most previous studies of small business finance, which found that barriers exist for quite small manufacturing firms seeking long-term debt and equity. No acceptable evidence has been produced showing undeserved barriers for service or commercial firms, or for medium-sized firms. For the very small firms, the conventional picture of well-organized capital markets simply does not become reality [20].

Other studies such as the 1976 analysis of venture capital market imperfections by Charles River Associates, confirm that equity is a more important form of external finance for manufacturing firms than for other small firms. Their findings, however, are more conservative with respect to market imperfections. Simply, they find none [21].

2.5 SOCIAL CAPITAL

What about the role of public capital? The level of public investment and the provision of public services are important determinants of regional growth. This has been acknowledged for a long time, particularly in such areas as transportation systems and the provision of public education. The expenditure of public funds is perhaps more

important when one looks at overall economic welfare, incorporating such considerations as quality of the environment, social services, health care, police protection, etc. These factors of economic welfare are outside the market system and, hence, influenced largely by public policy and public expenditures.

A report by the Exploratory Project for Economic Alternatives, for the Montana Department of Labor and Industry, stated that "capital investment decisions more than any other economic acts are society shaping. The decision as to what Montana will look like five, ten, twenty years from now are being made today in the capital investment decisions which for the most part are made in the private sector [29]." This report goes on further to state that the ability to influence capital flows is the key ingredient necessary to exercising self-determination in the area of economic growth. This may be a bit overly simplistic, since the existence of a capital supply does not create the demand for capital. First, capital must be needed for potentially feasible uses, which in turn depends on entrepreneurial and organizing skills, demand for and availability of resources, market size, etc. It may be more instructive to say that if one desires to influence growth patterns, assuming that growth is imminent, then capital supply and allocation can play an important role.

The private sector contains the bulk of investment funds in Montana. Total assets of insured commercial banks were $4 billion in 1978; assets of savings institutions totaled about $700 million. By comparison, the state Board of Investments controlled about $800 million in public funds in FY 1978. The total budget of state government was about $680 million in FY 1978, about one-third of which represented general fund revenue, and one-half pass-through monies from the federal government. Although only a small percentage of these funds could be invested in new capital, the state, nevertheless, could be an influential investor. Whether or not they should, however, is an entirely different matter; fundamentally involving the role and scope of government.

It is the author's opinion that there is a legitimate need to increase the rate of capital formation throughout the nation. Increased investment will result in increased productivity and income, while diminishing inflationary pressure. A larger and more efficient capital stock would also help the United States to compete in world markets, inprove the foreign trade balance, and strengthen the dollar relative to foreign currencies.

There is, however, no reason to believe that Montana's capital market is atypical. Increases in loans, assets and

capital expenditures indicate that Montana's financial network is performing well. Clearly, some imperfections exist...our interest rates are somewhat higher, our banking network not as well developed as in the major industrial states, and our loan to asset ratio lower than the national norm. Nevertheless, there is no evidence that capital shortages in Montana represent an impediment to the development of the state versus any other state.

New businesses do have difficulty in obtaining capital. Operating capital is available but medium term loans are often difficult to obtain. The length of term may be too long for many commercial banks, yet the sizes of the loans too small for insurance companies (and other private primary and secondary markets) and finally the loan itself may be beyond the experience of the lending organization.

Cheaper public capital (interest rates) or more available capital will not unilaterally promote business growth. Without a market and managerial talent little else matters... financial markets cannot create a demand for economic activity that is not there. Equity considerations, however, are very real...you have to have money to make money. Successful entrepreneurs can raise the ante; less polished or less risky ones can't, occassionally even with a good hand.

FOOTNOTES

Chapter 2

[1] Edward F. Dennison, Accounting for Slower Economic Growth: The United States in the 1970s, the Brookings Institution, 1979, Table 7-3.

[2] Western Analysis Inc., Unpublished Working Paper #7: Short-Term Inflation Forecasting and the Phillips Curve, 1980.

[3] Papers and Proceedings, Massachusetts Institute of Technology, Conference on Productivity, 1976.

[4] Edward F. Dennison, Explanations of Declining Productivity Growth, Survey of Current Business, United States Department of Commerce, August 1979.

[5] Economic Report of the President, The Council of Economic Advisors, United States Government Printing Office, 1980, p.88.

[6] Michael Kieschnick, Venture Capital and Urban Development, Council of State Planning Agencies, 1979.

[7] William D. Barth, Director of Small Business Practice of Arthur Anderson and Company, "Need Growth Capital? SBPD's Can Buy Time for Cash-Short Firms," INC, January 1980.

[8] FNIB Fact Book on Small Business; National Federation of Independent Business, 1979.

[9] Stahrl Edmunds, "Differing Perceptions of Small Business Problems" American Journal of Small Business Management, Volume 3, Number 4, April 1979.

[10] David Birch, The Job Generation Process, MIT Program on Neighborhood and Regional Change, Cambridge, Massachusetts, 1979.

[11] Thomas J. Romans, Capital Exports and Growth Among U.S. Regions, Wesleyan University Press, Middletown, Connecticut, 1865.

[12] G.H. Borts and J.L. Stein, "Regional Growth and Maturity in the United States: A Study of Regional Structural Change, Reprinted in Regional Analysis, L. Needleman editor, Penguin Books, 1968.

[13] Mahlon R. Straszheim, An Introduction and Overview of Regional Money Capital Markets, Essays in Regional Economics, John F. Kain and John R. Meyer, editors.

[14] Mark Meador, Interregional Mortgage Rate Differentials, FHLBB Journal, September 1978.

[15] William Longbrake and Maford Peterson, Regional and Interregional Variations in Mortgage Loan Rates, Journal of Economics and Business, Vol. 31 #2, 1979.

[16] Scott Goldsmith et al., The Permanent Fund and the Growth of the Alaskan Economy, Institute of Social and Economic Research, University of Alaska, 1977.

[17] Stanley Graham and Arthur J. Rolnick, A Case for Branch Banking in Montana, Minneapolis, FRB, Quarterly Review, Spring 1980.

[18] Harry Richardson, Regional Growth Theory, Halsted Press, 1973.

[19] Lawrence Litvak and Belven Daniels, Innovations in Development Finance, Council of State Planning Agencies, 1979.

[20] Michael Reischnick and Belven Daniels, "Preliminary Research on Capital Markets and Economic Development," National Rural Center and the Opportunity Funding Corporation, 1978.

[21] Charles River Associates, An Analysis of Venture Capital Market Imperfections, United States Department of Commerce, 1976.

[22] Exploratory Project for Economic Alternatives, Economic Strategies for Greater Montana Self-Reliance, Augusta, Maine, 1979.

3 OPTIONS FOR INFLUENCING CAPITAL MARKETS*

Three approaches exist for a state desiring to alter the normal operations of capital markets. First, state regulatory authority can be used to modify the rules governing operations of private financial institutions. Second, the state can influence lending decisions of private intermediaries through offering economic incentives. Third, the state may establish its own public financial intermediaries designed to make the desired financings directly. Of course, states may choose to use a combination of these three approaches since each may be best suited to particular situations.

3.0. USING STATE REGULATOR AUTHORITY TO INFLUENCE PRIVATE CAPITAL MARKETS

Almost one-half of the assets of Montana commercial banks is held in those chartered by state government. To maintain their charters, the banks must conform to certain rules governing their sources and uses of funds, and their competitive relationship to other banks. In addition to the

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* This chapter relies heavily on, and draws directly from, Litvak and Daniels, Innovations In Development Finance.

commercial banks, the state also charters about 26 local government and private employee owned credit unions, state offices of national finance companies, several large Montana-domiciled insurance companies, and three very small savings and loans. We will focus this discussion on the commercial bank sector.

Regulating Bank Assets and Liabilities

A principal feature of state regulation is that important limitations exist which work against the ability of the state to exert a major influence over traditional capital markets. First, the states influence is limited by the fact that the federal government charters the largest of the commercial banks, and thus the state has no influence over those banks which normally have the greatest flexibility to provide financing to firms needing capital. Second, public stock and bond capital markets are wholly outside the influence of the state. Third, and perhaps most important, the state must keep in mind the fact that capital is the most mobile of economic resources, and that the assets of those insitutions it regulates may at any time flow away to other institutions over which it has no control. Many financial institutions participate in buying and selling securities all over the country. Individual

depositors are always free to shift their assets to institutions not under state charter, or outside the state entirely.

For this latter reason, historic attempts at placing a ceiling on the cost of deposited liabilities both reduces the flow of funds to regulated institutions and discourages competition for those deposits. Because uses of funds are constrained by sources of funds, this could have a negative impact on the risk-taking ability of lenders. On the other hand, "creative liability regulation would remove barriers to competition on the liability side in order to encourage more aggressive risk taking on the asset side...stimulating the flow of capital to young, small firms." [1].

Regulating asset holdings, what banks loan to and invest in, has not been widely tried. This is not surprising since requiring the use of funds in a manner contrary to normal practice would likely result in a counterproductive flow of funds elsewhere, exacerbating the capital availability problem. One of the more useful approaches in the area would be to review the state regulations governing investments of private financial intermediaries to see if changes could be made in their "legal list" rules which would make a wider range of investments permissible.

Regulating Market Structure: Branching and New Institutions

In addition to mandating certain behavior, regulation can also mean facilitating more efficient capital markets. Branch banking is a form of facilitation, and has been a subject much discussed in Montana lately. An interim committee of the Montana Legislature has recently studied the issue, and have recommended that the state move to ease restrictions on branch banking.

We feel it is important to briefly touch upon this subject because it apparently has some bearing on the degree of competition in local bank markets. The following quote is taken from Litvak & Daniels [1]:

> While restrictions on where a bank may branch within its state supposedly protect the public, they in fact contribute substantially to monopoly and oligopoly banking market conditions that restrict the availability of credit, particularly to smaller enterprises. In thirty states banks are prohibited from setting up branch offices outside their home office counties. Without question, this restricts the degree of competition in local banking markets. Many of the states with liberalized branching laws did not always have such a liberal policy, and had the same kind of non-competitive banking markets found in limited branching states. Comparisons of bank behavior before and after branch banks enter into their market area, show that the fruits of branching liberalization include a larger proportion of deposits channeled into loans, a larger proportion of loans going to businesses, lower interest rates for borrowers, and improved service to customers.

A final method of regulating market structure is to use the state's authority to charter new, special purpose private institutions that would have the flexibility to fill

gaps in capital markets. Until very recently, the only institutions of this nature were federally chartered Business Development Corporations (BDC's). About twenty-seven states, including Montana, have operating BDC's today.

BDC's are required to lend only to businesses which have been turned down by conventional lenders. They raise money by selling stock to commercial banks, private corporations, and other financial entities. Banks will usually also extend a line of credit, such as up to 3 percent of capital and reserve, to the BDC. In fact, BDC's have relied heavily on debt as a source of funds, thereby requiring a steady repayment schedule from their debtors.

The record of these institutions is mixed. First, a handful of states has accounted for one-half of the total volume of loans made since these entities were first established in 1949. Second, there has been a substantial decline in the amount of loans made in recent years. For example, the Development Credit Corporation of Montana (DCCM) has had a steadily declining number of loan inquiries per year, from 71 in 1971 to none in 1978 and 1979. According to William Clarke, Manager of the DCCM, this can partly be attributed to the increase in the secondary market for SBA guaranteed loans [2]. It is clear, though, that collectively these institutions have a large unused borrowing capacity. What can explain their apparent failure in the face of small firms struggling to raise capital?

Basically, four reasons have been put forth to explain the problems faced by BCD's.

o BDC's are often governed and managed by individuals from the banking community who bring to the job the financial perspective of conventional lenders. Also, staffs have usually been very small and not aggressive.

o They have often been treated by banks as a dumping ground for loans that the bankers don't want. Also, promising firms sometimes repay the loan early to refinance at a lower rate, or receive conventional loans after the BDC decides to make the loan.

o They have been unable to lend to the riskier, and potentially more profitable firms because of their reliance on debt as a source of funds and consequent need for a strong, consistent cash flow. In addition, during recent times of wide interest rate fluctuations member banks have naturally become hesitant about pledging credit at a fixed rate.

o Finally, the nonprofit BDC's can suffer from a lack of incentive to produce, due to apathetic leadership and no owner interest with a clear incentive to succeed.

One should not get the impression that these entities simply can't succeed, if properly run. The Kansas Development Credit Corporation has had an enviable track record.

This entity, with about 2/3 of Kansas banks as members, has been in business 16 years and has outstanding over $95 million in loans with a loss ratio of less than .5 percent. It borrows at the prime rate from member banks and often participates with banks on a loan. In 1977 it organized, and is a majority owner of, an SBIC known as Kansas Venture Capital. It also acts as a secondary market, buying SBA guaranteed loans from banks and reselling them to the state and other pension funds. [3].

Recent innovations on the concept of BDC's suggest that the participating financial institutions must have a genuine stake in the BDC and that decentralized operations will allow for the indirect incentive to member banks of increased economic activity in their market area. In western Massachusetts twenty savings banks have agreed to cooperate in an inter-bank loan participation program. The consortium, which is non-statutory and subject to no special regulation, takes riskier positions than its member banks, and serves borrowers in the member banks market area. Also in Massachusetts, the Massachusetts Capital Resource Corporation was organized by, and received its equity financing from, member insurance companies who have been promised state tax reductions if their new financing vehicle will aggressively invest in growing firms generating new jobs.

California's 1978 enabling legislation for Business and Industrial Development Companies allows these development corporations to be chartered anywhere in the state, and to obviously compete with one another.

3.1 USING ECONOMIC INCENTIVES: SUBSIDIES, GUARANTEES AND LOAN PURCHASES.

Recognizing that the driving force behind private capital flows is the pursuit of profit, state policy-makers have investigated regulations which create economic incentives for credit-worthy businesses. This will require either making it easier for the business to make the necessary payments and/or reducing the risk assumed by the lender. Subsidies can be achieved either through lowering the cost of capital to the lender or simply assuming responsibility for part of the repayment. The state may lower risks assumed by suppliers of capital through guaranteeing loans and purchasing parts of those loans. The state can also reduce risk through facilitating the flow of information and supporting information and transaction costs.

Subsidizing the Cost of Capital

The Montana Banker's Association has for the last several years argued that more public funds should be invested in-state; or conversely, too many investment dollars are flowing out of Montana to more profitable eastern markets. Although Montana investments have been rising lately (up 60%, for the past fiscal year) they constitute only 15.6 percent of the total fund, a proportion which disturbs many Montana bankers.

Approximately one-half of the Montana investments are in the form of short-term certificates of deposit purchased from in-state banks at prevailing national rates. Some bankers have argued that the state's pricing policy is occasionally above the "national rate" causing several large banks to not participate in the program [4]. This problem may be the result of dated quotes by either the bankers or investment board staff which would frequently result in a spread. Mr. Rodney Young, Assistant Investment Officer with the Board, has indicated that the "rate" is sometimes higher and sometimes lower than the national, but that there is no particular tendency in either direction [5]. The issue of rates is not, however, unique to Montana. Recently, the West Virginia Board of Investments passed a new policy for

the West Virginia Certificates of Deposit program. This policy was adopted after discussion with many bankers within the state. It was the belief of the state's bankers that a nationwide rate, such as the one-year T-Bill yield, would be the best rate to use in pricing the West Virginia Certificates of Deposit. The rate on the certificates of deposit is always less than the yield on a one-year T-Bill. Therefore, a bank could reinvest this money in a one-year T-Bill and make a profit on its money.

According to a recent survey by the Montana Bankers Association, the vast majority (78%) of bankers believe that Montana banks should be able to purchase state funds at a lower rate than out-of-state investors. This argument is based on two research papers which support the contention that the reduction in interest income to the state will be more than made up by increased income and taxes which result from a greater demand deposit and loan base. The first study, a thesis by Roger Rutz, The University of Nebraska, is a theoretical piece which argues the conceptual existance of such "multipliers" but admits that measurement is probably impossible [6]. The second study by Dr. William Becker, under contract with the Minnesota Bankers Association, represents an empirical approach to the question but

suffers from seriously flawed model specification. The study suggests that for every dollar lost in interest nearly $10 in increased state tax collection occurs because of increased economic activity [7]. After careful review of the model specification and the development of a similar model for Montana, it is the author's (and several other reviewer's) opinion that the Becker work is totally unfounded. Clearly tax, income, and time deposits are highly associated, but the causal question is much different. Furthermore, testing with first differences and percent changes using Beckman's regression specifications showed no statistical signficance in the behavioral form.

Loan demand is not created by the existence of time deposits or cheap capital. Financial markets cannot create a demand or economic activity that is not there. According to Dr. Arlo Trussing (University of Alaska) in his presentation before the Alaska House Special Committee on the Permanent Fund, interest subsidizes don't work because:

> "1) Cheaper, more available capital will be an inducement for businessmen to be capital-intensive, not labor intensive. Thus, the number of jobs created by subsidy programs may be less than the programs' framers would hope.
>
> 2) Very little sound business growth will occur because of lowered interest rates because a) the cost of money is only a minor cost of doing business. Lower interest rates are unlikely to be the critical point which will make a business thrive, which was not viable under market conditions; and

b) businesses which require lower interest rates to survive will very probably need continued infusions of public money in order to remain viable.

3) Since government loan programs have a poor track record for establishing rigorous loan standards, there is a good probability that many subsidized loans will default."[8]

Furthermore, loan subsidies through the banking system would be difficult to administer. As with the case in Kentucky, arbitrage could become an issue with the program having little impact on business loans. Also, there appears to be little need for increasing operating loans; equity and risk remain the problem. The fundamental difficulty, however, is that such a program (interest subsidy) would be inconsistent with the mandate of the Board of Investments and would also cost the taxpayers money. The Board must protect the assets of the various trust funds, and it must approve investments which will earn a high rate of return. Generating economic growth within the state is always a concern as long as it is consistent with these other responsibilities. The following quotes from recent correspondence with other investment boards illustrate that Montana's policies are not atypical.

"Your study of alternative investment strategies is one of many which have been launched by state governments or so-called 'non-profit public interest' organizations. The mere existence of the studies suggests that capital is scarce and expensive because, at the Federal level, we have

pursued tax, regulatory, and social policies which discourage savings and investment by individuals. Frankly, we have grave reservations about the logic and efficacy of promoting investments, particularly those in-state." James LaFleur, Wisconsin.

"Our statutes do not permit 'unconventional' investments. Our overriding criteria for investing state funds is the expected rate of return. However, if we had to choose between comparable investment alternatives, then in-state investments would be given preference, all other things being equal." Gordon Linsday, Michigan.

"With respect to the questions of in-state versus out-of-state investments, our Board of Trustees has sought to achieve the highest rate of return possible on its portfolio. They will consider in-state investments provided that the return/risk ratio is equal to or better than that available on out-of-state investments." Charles Wilkinson, Missippippi.

"The Retirement Fund has been involved in an option writing program on our stock portfolio which has been very successful. We also participate in a security loan program. In-state investments are encouraged if returns are equal to those available and out-of-state on similar securities. Rate of return is the overriding criteria when investing retirement funds." Reed Gunderson, Utah.

"Rate of return has to be the overriding criteria when you are investing trust funds. Trust beneficiaries will accept nothing less. We do however limit our mortgage investments to Oregon loans only feeling that we have sufficient portfolio geographical diversification in our bond and stock portions." James George, Oregon.

"We encourage in-state investments when yields offered are otherwise competitive. Our investment policy establishes 'Protection of Principal' as our most important objective followed by rate-of-return as second in importance." Charles Bratton, Kentucky.

"We do, internally, encourage in-state investments but only to the extent that it does not cost the Fund any income yield or cause the Fund to incur additional risk." Jack Cooper, Ohio.

"Expected rate of return is the overriding criteria. However, it is not implemented devoid of any consideration of societal values. I would call your attention to a policy statement on page 24 of the Annual Report. We also favor California investments on an all things equal basis." Melvin Petersen, California.

"Minnesota-based corporations or those with operations within the state are not favored or disfavored relative to our universe of investment opportunities. Nevertheless, we are very receptive to and encourage contacts and financing proposals from Minnesota companies with the clear understanding that risk and return factors must be competitive with our other alternatives." Johnathan White, Minnesota.

Reducing Risks of Private Financial Institutions

Loan guarantee programs for plant, equipment and machinery, also known as industrial mortgage insurance, currently exist in fifteen states. In these programs the state pledges to cover any default (or portion of default) on the part of the borrower, thus decreasing the financial risk to the lender. Borrowers with guaranteed loans can thus gain access to capital markets that heretofore may have been unavailable due to the lenders perception of excessive risk surrounding the loan request.

In a state guarantee program the risk is shifted from the lender to the taxpayers of the state. The state

normally assesses the financed business a fee for providing the guarantee. This fee represents a risk premium paid to the state's taxpayers, and can be deposited in a reserve fund established to pay off potential defaults. This reserve fund may also consist of a one time legislative appropriation, such as in Massachusetts. This must be done in those states where laws prohibit the state pledging its "full faith and credit" to back business financing.

Obtaining a guarantee is important to the borrower of funds for a new or unproven business. Usually, the Small Business Administration will guarantee many of these loans. According to one source, obtaining a guarantee for these types of loans has not been much of a problem in Montana [9].

Two overriding issues must be carefully resolved when designing a state guarantee program. First, scarce public resources should be used only to assist those firms that would not receive guarantees elsewhere, such as from SBA, FMHA, etc., and thus would not receive financing without the guarantee. Evidently, in Montana many loans to new businesses already have some form of government guarantee [9]. Second, the jobs and income generated will be maximized if the funds for lending would, in the absence of the guarantee, have gone to out-of-state investments, as

opposed to another in-state business. In the latter case the net jobs generated would be the difference between what the alternative investment would have generated and what the funded business provides. In the former case net jobs generated would be equal to the total jobs in the newly funded firm.

A variety of procedures exist to try to ensure that guarantees only go to firms really needing them. Giving guarantees to large firms which don't need them is simply a waste of public funds. Guaranteeing too large a portion of the loan may be unnecessary, and, in a cumulative manner will restrict the availability of the program for other firms in need. In New Jersey the borrower must show that it could not obtain conventional financing. Connecticut and Ohio set a maximum amount on the guaranteed portion of the loan. Almost all state guaranty programs only guarantee 90 percent or less of a loan, thereby ensuring that the private lender takes some risk and has an incentive to carefully screen potential borrowers. Additional filtering mechanisms consist of the fees charged the borrower, which can be .5 percent of the guarantee. Also, fees ranging from .5 to 1 percent of the outstanding balance may be annually assessed and deposited in the reserve fund. These practices will help further screen out firms which are too risky.

Considering displacement effects must be done on a case-by-case basis. Generally speaking, assisting banks which have lower than average loan to asset ratios and an unusually large holding of government securities, rather than those which are loaned "up," will have the greatest marginal impact on new economic growth, since the former will probably be using money previously invested out of state.

To summarize:

o Limit guarantees to instances where they really make a difference.

o Set fees to cover the entire cost of the program, adjusted for levels of risk. Higher risks should pay more.

o Leave a portion of the loan unguaranteed to provide an incentive for the lender.

Financial institutions engaged in secondary market operations reduce the risk to the lender by simply buying all or part of the loan, thus increasing the lender's preference for the loan and boosting the total dollar volume of loans which an individual bank may make by removing the loan which the bank originated from its asset portfolio. Traditionally, the secondary market has consisted of large insurance companies, pension funds, trust companies and government agencies. These substantial, major financial

entities normally need to continually seek new investments, and since the mid-1970's have become active in buying government guaranteed loans made by banks across the country.

According to one banker, this indirect source of loan capital has been a major tool allowing his bank to increase its lending capacity by 50 percent! He feels that in many cases Montana banks in urban and quickly growing areas may be faced with insufficient deposits to satisfy their loan demand [9]. The existence of secondary markets for guaranteed loans acts to increase the capacity of the bank to make loans.

A recent problem with this source of indirect financing is that during periods of high interest rates and tight credit, conventional secondary markets will dry up since they will begin to invest heavily in short-term, higher return securities such as Treasury Bills, Money Market Certificates and Certificates of Deposit. When this occurs, areas of the country which are distant and remote from the financial centers where the secondary market exists are the first to be affected. This is simply because these geographic regions historically have had looser financial ties than other regions, and are perhaps viewed as relatively more risky.

Several bankers we interveiwed expressed the need for additional secondary markets for guaranteed business loans, and felt that the state Board of Investments could provide a "fiduciarily" sound role by being more active in buying government guaranteed business loans [2, 9, 10]. In fact, the Kansas pension system has bought $9 million in SBA guaranteed portions of loans from Kansas banks. This was permitted under the "prudent man" concept operative in Kansas.

Conversations with the state Board of Investments revealed that they have traditionally been active only in buying SBA guaranteed real estate loans. While they still carry some on their books, and will tend to accept these if offered, they do not think highly of these investments. Often the loans are paid off early, which disrupts the Board's ability to exert influence over the timing of their investments. They do not carry call protection, which is available for most similar types of investments. Finally, they do not exhibit upward movement in a rising market, but will fall in a down market. In spite of these drawbacks, though, we were told that the Board will usually buy guaranteed commercial real estate loans if offered, but they simply haven't been offered very many lately [11].

Until recently, the Board of Investments was not active in the area of buying guaranteed business loans. It is unknown whether this was due to explicit or implicit policy. Whatever the reason, they have recently broken with this tradition and bought a $500,000 Federal Aviation Administration 90% guaranteed loan to Big Sky Airlines. The government guarantee was the key ingredient necessary to their positive consideration of this investment. A more active Board position relative to buying guaranteed business loans would act to increase capital flows to in-state businesses, with minimum risk to the Board.

3.2 DIRECT STATE FINANCIAL INTERMEDIATION

Previously, we looked at mechanisms state government might use to encourage private capital markets to make investments that otherwise would not occur. In addition to attempting to influence private institutions, a state may operate its own financial intermediary. In fact, since 1970 thirty states have decided to do so.

These efforts can often directly address the problem of capital availability through providing more efficient risk bearing, reducing information and transaction costs, and

promoting competition among lenders. Investments considered too risky for an individual lender can, through risk pooling, be made more acceptable because the risk is spread among many lenders, usually the state's taxpayers, each of whom assume only a small fraction of the risk. Second, through channeling many small volume financing requests through a single agency the costs of gathering information and finalizing a transaction, on a per dollar of financing basis, can be minimized. Also, the public intermediary may simply charge a higher fee to compensate for these costs, something private institutions normally don't do, choosing instead to avoid making the loan altogether. Finally, in a rural state like Montana, the entry of a new form of financial intermediary will no doubt increase competition among lenders, thereby promoting a healthier capital market.

We will investigate three basic types of direct state financial intermediation. The first is where the state sells bonds to raise money to provide loans to businesses. The second consists of the state using tax revenues to support a direct loan program. The third looks at programs which are designed to provide equity financing. This may or may not include acquiring ownership in the borrower, but generally means that repayment of the financing is flexible and negotiated on a case-by-case basis.

Providing Loans Financed Through Bonds

Currently, forty-eight states, including Montana, allow revenue-bond financing of industry. Because of statutory and constitutional restrictions only fourteen states authorize general obligation financing of industry. The basic difference between these two forms of bonds is the security pledged to back up the debt service payments. In the case of revenue bonds, the state or locality issues tax-exempt bonds to finance plant or equipment which is then leased or sold on installment to the business. The bond can only be repaid out of the lease or installment proceeds. In contrast, general obligation bonds can, and must if necessary, be repaid out of the general tax revenues of the issuing state or locality.

The economic value of tax-exempt industrial revenue bond (IRB) financing is that the issuing agency simply passes on to the ultimate borrower the lower cost of financing which the tax-exempt feature allows for. It is essentially a capital subsidy which, as discussed earlier, is a relatively ineffective stimulus. The cost of capital is not so important to the entrepreneur as its availability, and since most states allow for IRB's their advantage as an inducement is cancelled out. More important, though, because revenue bonds are only backed by the strength of the

business, it is clear that they are only principally used to finance companies already perceived as credit-worthy. It can be argued that these types of firms should not receive public assistance in the first place.

According to Litvak & Daniels [1], a needed change in these programs would be to offer additional collateral as security to the bond buyer so that precisely those firms who may not have qualified for IRB's on their own would now be financed. One method of doing this would be to issue general obligation (GO) bonds, instead of IRB's, thereby backing the bond with the full faith and credit of the state. Thirty-six states, including Montana, don't currently allow for that option because of statutory or constitutional limitations. A second method of offering additional security is to insure the bonds with state mortgage insurance.

Today at least six states have Industrial Mortgage Insurance Programs that insure revenue bond issues that would not otherwise have been marketable. The insurance is either in the form of a one-time appropriation to a reserve fund, or the issuance of GO bonds and/or the possible use of general fund revenues in those fourteen states where not prohibited. It should be noted that where reserve funds are established, limits are usually set on the insured portion

of the loan, say up to 50 percent, or X dollars, in order to insure only what is needed to get the loan made and leverage the fund to its maximum to spread the benefits of the program to the widest degree practicable.

Connecticut's use of pooling and backup levels of security is touted as the most advanced form of an "Umbrella" revenue bond program in operation today. Connecticut's program, begun in 1973, reviews, screens and evaluates the enterprises requesting loans, then pools a number of them together and sells a single bond on the public market. This acts to reduce information and transaction costs to the ultimate bond buyer and, through spreading and pooling, reduces risk. By selling on the public bond market, they also attempt to "import" capital into the state. The program is designed to cover its administrative costs by charging fees to the firms receiving the loans. This also acts to screen out those firms unwilling to participate with their own funds.

It is important to clearly understand the levels of security provided by Connecticut's program. First, 15 percent of the bond proceeds go to a reserve fund. Second, the full faith and credit of the state is pledged as insurance on first mortgages. Third, the revenue bonds are backed by the accumulated reserves of the Connecticut

Development Authority, the administering agency. Finally, there always exists the authority to issue GO bonds, if needed. Interestingly, other forms of insurance are being explored for those states who are prohibited from backing private credit. Alaska is now investigating the possibility of backing revenue bonds with an income stream of oil revenues.

A few final points about this program. Connecticut has very effectively used staff resources and expense to review and package businesses which normally may have been viewed as too risky, and left unfinanced by conventional capital markets. But their absence of defaults may also reflect an undesirable degree of risk aversion on the part of the agency. It is difficult, therefore, to state with any degree of precision whether the program is really doing all it could, however, it is certainly better designed than many of the others.

Providing Loans Financed Through State Revenues

An alternative to selling bonds to raise money is to use state tax revenues or other state funds. Here, the state would directly use the wealth of its citizens to finance these programs, rather than borrowing on the

collateral of the state's future wealth. Intermediaries funded from these sources are commonly referred to as "direct loan programs" since they do not require raising capital by way of the bond market. Today, fifteen programs of this nature exist for financing plant construction, and eleven allow for equipment financing. Where state constitutions disallow business loans, such as Montana, these programs normally loan through local non-profit development authorities.

The Pennsylvania Industrial Development Authority (PIDA) is a good example of this type of program. Between 1958 and 1972 it received all of its $188 million in funding through annual legislative appropriations. However, in 1975 it had to go to the bond market to raise funds because the regular appropriation was not forthcoming. PIDA operates an interest subsidy program, lending at rates near or under the tax-exempt bond rate. They can afford to do this since they are not obligated to make regular repayments for their financing which is the case when funds are raised through the sale of bonds. PIDA also requires at least a 50 percent participation in its loans by a private financial institution, with itself and the local development agency splitting the remainder. This split will vary, with the low cost PIDA participation increasing as the unemployment rate in the area where the loan is to be made increases.

Because these programs are not accountable to the private capital markets, and often do not have a fixed repayment schedule for the funds they use, they have more flexibilty to lend to firms in need than the bond-financed programs. They have, on average, been making riskier loans, as reflected in their typically higher loss rates. However, some programs, such as PIDA, have extroadinarily low loss rates. This could very well reflect the extreme caution of fund managers who are dependent on annual appropriations and the political process. Of course, there is the contrary danger that an appropriation-dependent program may become too susceptible to politics, and consequently risk making poor loans.

A variation in funding through periodic appropriations is to receive a one-time "grant of principal" from the state. This operates as a revolving fund, and as the loans are repaid the money is relent. This approach might encourage more sound lending practices, and insulate the intermediary from political pressures.

Finally, other state financial resources may be used to finance direct loan programs. The Kentucky program has borrowed from their public employee retirement fund.

Alaska's program has borrowed from its natural resource endowment funds. While these state investment funds normally have large amounts of assets to invest, significant political problems exist which tend to block access to them. Employee retirement funds properly belong to the state's employees, who may not want to assume even the smallest risk associated with using part of their portfolio in a direct loan program. Other funds, such as our Trust and Legacy Fund, generate revenue partially earmarked for public schools; tampering with these funds would definitely cause problems with the various groups lobbying on behalf of public schools. Most important, the professional managers of these state investment funds are, understandably, quite reluctant to make their funds available for more speculative, riskier investments, citing their fiduciary responsibility under the "prudent man" concept. While this is in the final analysis a legal issue, the position that the distinct functions of portfolio investment and economic development ought to be kept totally separate seems to have merit.

It has also been pointed out that the use of state funds for financing these programs may have more indirect costs to the state, in terms of using scarce capital, than importing capital through selling bonds in the public

market. On the other hand, incurring long-term debt may also have hidden costs which may surface in the future.

Two additional sources of funding should be mentioned. Minnesota's revolving loan fund obtained 75 percent of its capital from the Economic Development Administration. The PIDA recently sold $72.5 million worth of special obligation bonds which are secured by all the assets and income of the issuing agency, as well as revenue of the specific firm, but do not require the full faith and credit of the state.

Equity Providing Intermediaries

Earlier we looked at the financing problems faced by new or expanding businesses. Literature on the subject has concluded that the most pressing problem is one of raising the equity capital necessary to borrow conventional debt monies "...new measures are needed to stimulate the investment of equity capital in start-up situations by investors not actively involved in management [12]." State efforts that provide only debt obviously overlook this critical need.

Equity financing also provides new businesses with a needed holiday from the regular repayment schedules required of debt. Essentially, equity represents capital supplied to

a firm in return for a defined share of its uncertain future income. It does not necessarily involve formal ownership in the business.

What has recently happened to alter the normal functioning of venture capitalists who have traditionally filled this financing role? To answer this question one must understand how venture capital firms recover their investment, and profit. To cash in on its capital gains, the firm must be able to sell its share of the financed business to someone. This is usually made possible by the firm which has been financed "going public," that is selling its shares to a large number of investors who can then trade them on the public stock exchanges. Unfortunately, since the bull market of the late 1960's it has been extremely difficult for any young businesses to go public because of the increasing aversion of investors to risk, generally lower stock market prices, and the loss through merger of many small investment firms which specialized in helping young firms go public. For all these reasons, venture capitalists recently have been less likely to provide pure equity, focusing instead on more debt-like instruments [12, 13].

Only a small number of states have attempted the difficult and challenging task of establishing equity-

providing intermediaries. In contrast, many European countries and Canadian provinces have experience in state-capitalized equity financing development banks.

The Connecticut Product Development Corporation (CPDC) was established in 1973. It invests in specific products of a corporation, not the corporation itself. It prefers to invest in new or expanding lines of relatively well-established existing firms, not new businesses. CPDC concentrates in funding ventures at the product development stage (between research and production), but apparently has been moving more into the marketing and production phases as the need has arisen. CPDC receives its funding through the sale of GO bonds repaid from general state tax revenues. It recovers its investments through a royalty agreement, whereby in return for up to 60 percent of a firm's product development cost it receives a 5 percent royalty on the net sales of the firm. The royalty agreement terminates if royalties accumulate to five times the original grant.

The Alaska Renewable Resources Corporation (ARRC) will invest in firms which are developing technologies, markets, or products utilizing and based on renewable resources, such as forest products, fisheries, agriculture, and renewable energy sources. ARRC can also invest monies for needed technical assistance, and applied research and demonstration

projects. It is prohibited from financing actual production costs. ARRC receives its capitalization from a portion of the state's proceeds from mineral leases, rentals, bonuses and royalties from minerals produced on state lands. It has the flexibility to employ a wide range of financing methods, including straight equity up to a maximum of 49 percent ownership, direct loans, loan guarantees, convertable debt, royalties, or grants.

Other state equity intermediaries include the Massachusetts Technology Development Corporation, designed to invest in high technology businesses and funded by an EDA grant, which requires the intermediary to furnish only debt, not the equity it was intended to provide. The Kentucky Highlands Investment Corporation targets its investments in economically depressed areas, and is funded by federal tax revenue. The Massachusetts Community Development Finance Corporation provides financing only to community development corporation-sponsored ventures, a public/private type of business entity.

It is important to reiterate that the major distinction setting these intermediaries apart is that their financing arrangements provide very flexible repayment terms, can help further leverage additional outside investment, and provide the opportunity for the state to recover substantial profits.

In addition to the royalty-type arrangement, there are four commonly-used equity-like financial instruments. When common stock is purchased, the investor owns a share of the company and may require a prorated portion of net earnings. When preferred stock is purchased the investor has no formal say in management and may require a share of the gross earnings, before expenses. Convertable debentures provide for the lender to, in addition to receiving regular repayments of principal and interest, have the right to convert his notes to common stock by a certain future date and at an agreed upon price. Subordinated debt differs from a straight loan to the extent that, in the event of default, the lender is paid after all other suppliers of debt have been satisfied. In addition to these formal instruments, the provider of equity-like capital may use variations of the above, such as debt with delayed repayments of principal to reduce the burden of repayment early in the life of the loan, or debt with detachable warrants which, by themselves, allow the lender to purchase common stock at an agreed upon price at any time in the future. Finally, agreements can be made allowing the intermediary to simply ask for a percent of sales or gross earnings in return for the financing, whatever its form.

The problems facing venture capitalists when recovering investments were discussed earlier. An obvious, but sometimes self-defeating, solution is to use a combination of debt and equity. An additional approach involves what is known as a "put." Here the intermediary requires that the financed firm, at the option of the intermediary, buy back the stock at a fixed price at a certain date. The price will reflect an acceptable return to the intermediary. The intermediary can also retain the option of selling its shares for a higher price elsewhere.

Common and preferred stock both eliminate regular repayments, thus benefitting the enterprise which may not yet have reached a break-even point. They also carry a high degree of risk since the investor can end up with nothing if the venture does not succeed. Convertible debt both protects the investor more since it allows for regular repayment, and has the added bonus of ownership if the firm does well. Subordinated debt will enhance the recipient firms ability to get more money since it does not increase the risk of more senior lenders, but instead "appears" as equity. The royalty arrangement has two important advantages: it carries no formal claim on the firm's earnings until there is a positive cash flow, and it does not compromise the ownership structure of the firm.

Another variable which will affect the operation of the intermediary is where it obtains it funding. Those entities receiving funding from GO bonds, paid off by general tax revenues, or other federal or state revenues, will avoid the problem of fixed repayment schedules, which are definitely not suitable for investments generating uncertain revenue streams. However, not requiring the equity provider to pay for its funds may encourage less efficient and business-like operations. On the other hand, these financial intermediaries must show good results or they will likely not receive additional appropriations, or authority to sell bonds. They may also be required, as is the case with CPDC, to eventually become self-sustaining. Finally, those programs authorized to sell bonds on an "as needed" basis are still heavily dependent on continual approval by the public bond market.

Limitations on the size of a single investment acts to ensure that these portfolios have a degree of diversification, and that their assets are spread over as large a number of firms as is feasible. No existing program is allowed to own more than 49 percent of the voting stock of a recipient business.

Special problems may surface when considering the problems of identifying and screening candidate firms for

equity capital, and recovering the hoped-for profits from the investment of public funds. Equity providing intermediaries will generally be faced with potential investments which are just an idea, with little or no product or market experience to lean on, and consequently very rough business plans and projections. In addition, the problem is more critical since the ultimate return to the state may only materialize if the concept proves successful, unlike debt where repayment is guaranteed if the firm only breaks even. Hence, the need for professional, experienced program management is crucial. Competent technical assistance in soliciting, screening, and ongoing consulting with the recipient firm will be every bit as crucial to the success of the venture, and program, as providing the necessary financing. It is also recommended that these functions be provided by an independent organization to encourage financing decisions outside the influence of politics, and independent of biases that may arise in the proposal development stage.

3.3 JOINT PUBLIC/PRIVATE EFFORTS

Until now we have been looking principally at programs directly operated by the state. For various reasons, such

as the obvious risk of operating business investment programs subject to political review and the difficulty of initiating any new government programs, one may desire to keep efforts to increase the availability of equity-like capital mainly in the private sector. In other words, while government may act to facilitate and expedite the provisions of equity to firms in need, it may not actually need to have a lead operative role.

Because of the overriding importance of federal taxation policy on investment and disinvestment, the potential role for a state government in these areas of economic incentives is limited. Today, there are few examples of innovative and thoughtful public/private efforts. However, there are some approaches the state may take and, in one case we are aware of, a state has actually tried to formally implement a unique public/private relationship.

Similar to the loan guarantee program operated by the public sector, a state may also guarantee equity investments by private venture capitalists [12]. Essentially, guaranteeing a portion of an equity investment clearly reduces the risk taken by the equity supplying firm or individual. While obviously a high risk approach, this concept has the potential to greatly increase the availability of equity capital, provided that both those individuals or firms

needing funds and supplying funds are aware of the program's existence. Only a small percentage of the equity investment should be guaranteed to ensure that investments are not made frivolously. A fee for furnishing the guarantee should be charged. This fee could either take the form of a fixed one-time percentage of the guarantee, or a percentage of the eventual return to the financing party, or a combination of the two.

Another approach assumes that both potentially profitable ventures and interested private investors exist, but that they are simply unaware of one another. It is likely that this often happens particularly in a state like Montana which is relatively remote from financial centers and does not have a well-developed, sophisticated financing network. Here, the state formally assumes the role of a "broker," bringing investors and entrepreneurs together. This would require a highly professional staff, the ability to perform outreach, screening, and business planning, and a close working relationship with venture capitalists and other investors. Although the state would have to support a professional staff, the program could be self-sustaining through charging a fee for successful deals which are brokered.

The state of Maine has recently enacted legislation providing significant economic incentives for individuals or businesses to invest in a state-chartered venture capital intermediary, the Maine Capital Corporation (MCC). The Maine Capital Corporation is a private, for-profit company designed to provide equity-like capital and long-term subordinated debt, and act as an organized clearinghouse to match the funds and objectives of investors with the needs of private entrepreneurs.

The MCC is to initially raise $1 million in private capital through the sale of stock. It will then register as a Small Business Investment Company (SBIC), licensed by the Small Business Administration, in order to borrow up to $4 million more from the government at its "agency rate." While this rate used to be very low, it has recently been raised, fluctuating with respect to the "prime" lending rate.

The important distinction between this approach and others is that this is totally private and for-profit. The state has acted to increase the incentive for private investors to invest the $1 million in equity by granting state income taxpayers (individual, trust or corporate) who by stock in MCC an annual state income tax credit over the following five years equal to 10 percent of the cost of

their stock, or a total tax credit of 50 percent of their total investment. The annual credit may not exceed 50 percent of their tax liability for that year, but unused credits may be carried forward up to four years. These incentives are in addition to the normal taxation incentives provided to SBIC stockholders by the federal government.

With $1 million in equity and up to $5 million in total capital, MCC will be in a position to provide some degree of flexible financing. Like similar SBIC's, MCC will obviously need to receive sufficient current yield from investments to provide a spread over the cost of the federal loans, thus requiring a certain amount of debt-type financing at close to prevailing interest rates. The degree to which it will be able to provide equity-like capital will initially depend on its equity base and provisions for investor return and, over the long-term, its degree of success and ability to "cash out" of its investments at favorable rates of return.

The Maine Development Foundation (MDF), an independent, non-profit entity designed to promote economic development is to serve as an "investment advisor/manager" to the MCC, providing professional and administrative support. The MDF grew out of the same task force as the MCC, and is funded through private solicitations matched one-for-one by the state of Maine. The MDF has, of course, many other specific

economic development goals and objectives, one of the most significant being that it is mandated to operate outside the system of state government. Also, it was built on the premise that an "effective goal-oriented partnership between public and private forces is the essential ingredient in successful economic development [14]."

FOOTNOTES

Chapter 3

[1] Litvak, L. and Daniels, B. Innovations In Development Finance, Council of State Planning Agencies, 1979.

[2] Personal communication with William Clarke, Development Credit Corporation of Montana, June 5, 1980.

[3] Personal communication with George Doak, Kansas Development Credit Corporation, May 8, 1980.

[4] Personal communications with Mr. Fred Flanders, President, Bank of Montana, Helena.

[5] Personal communications with Mr. Rodney Young, Investment Officer, State of Montana, Helena.

[6] Roger D. Rutz, The Economic Effects of Idle Public Funding Policies: Theory and Evidence in the State of Nebraska, Unpublished Thesis, University of Nebraska, 1976.

[7] William Becker, Does Minnesota Need A Local Government Pooled Investment Fund?, Minnesota Bankers Association, 1978.

[8] Arlo Trussing, Testimony before the Alaska House Special Committee on the Permanent Fund, 1976.

[9] Personal communication with Fred Flanders, Bank of Montana, April 14, 1980.

[10] Personal communication with David Brown, First National Bank of Helena, April 14, 1980.

[11] Personal communication with Rodney Young, Montana Board of Investments, June 23, 1980.

[12] Keischnick, M., Venture Capital and Urban Development, Council of State Planning Agencies, 1979.

[13] Enervest, Inc., "Venture Capital", 1979.

[14] The Maine Development Foundation, "Goals and Objectives for 1980", 1979.

4 CONCLUSION AND RECOMMENDATIONS

A summary of the major conclusions reached in this report follows:

(1) The overall availability of and demand for capital in Montana does not appear to be atypical. There is no direct evidence that capital shortages in Montana represent a major impediment to the state's economic development.

(2) Making loans available at reduced cost and making capital more freely available will not, by themselves, promote sound business growth. A demand for that money must exist. Managerial talent, entrepreneurial skills, skilled labor, etc., all are needed to allow for economic development.

(3) There is a need in the United States to increase the rate of capital formation. This will act to reduce inflationary pressures, increase the value of the dollar relative to other currencies and, through productivity increases, encourage increased exports of U.S. products.

(4) There is no empirical evidence to support the contention that the state of Montana will benefit from directing the Board of Investments to invest more funds with the state banking community. Furthermore, loan subsidies of this nature would be difficult to administer, and inconsis-

tent with the state's need to maintain a professional institutional investor capability.

(5) Some imperfections in Montana's capital markets apparently exist, such as:

- o Higher than average interest rates,
- o A banking network which is not as fully developed as elsewhere,
- o A general lack of sophistication in business and venture financing,
- o Gaps in the availability of capital for large, middle to long-term business loans,
- o A lower than average loan/asset ratio, implying either a low relative demand for capital or conservative bank lending policies due to greater risk aversion on the part of lenders and lack of competition among banks,
- o An undeveloped and inconsistent secondary market for government guaranteed loans.

(6) Independent, new, and small expanding businesses are most likely to suffer when capital market imperfections exist. Unfortunately, it is precisely these types of businesses which provide the majority of new jobs.

(7) It is more difficult than ever to raise the equity capital necessary for securing business financing. This is particularly true in areas like Montana which are remote

from financial centers and suffer from an almost nonexistent venture capital financing network.

(8) A program designed to increase economic diversification through providing needed capital to creditworthy firms may benefit from joint public/private management. The private sector should play a major role in funding and overseeing the implementation and operation of such a program.

(9) A public/private economic development entity would complement a state-supported development finance effort through providing administrative and technical support and liaison with the business community.

4.1 RECOMMENDATIONS AND OPTIONS

Although the overall capital situation in Montana does not appear to be atypical, there is evidence of specific capital market imperfections. These problems impact small, independent firms most severely, and thus adversely affect the rate of new job formation. The ever present need for business equity and venture financing to provide new jobs, and the widely supported policy of promoting economic diversification lead us to recommend that measures to

increase the supply of capital be investigated. Our recommendations follow and are based on our judgment that the state has a proper role in encouraging capital formation in Montana and fostering a more balanced economy.

These options for consideration are the result of much analysis and discussion, and represent what we believe to be a reasonable and cautious approach to the problems facing Montana. They are, of course, subject to change and modification based upon reviewers comments and follow-up discussions, and a closer look at their legal and fiscal implications.

Increased Secondary Market Role

We recommend the Board of Investments take a more aggressive, active stance toward purchasing government guaranteed business loans. In the past the Board would consider buying only guaranteed real estate loans, but just recently they bought an FAA guaranteed loan to Big Sky Airlines. Guaranteed business loans carry no more real risk than guaranteed real estate loans, and may, in some cases, offer a greater return.

By enabling local commercial banks to more readily sell their guaranteed loans, the Board will act to increase the banks capacity for making business loans. This is important

since those banks which are already actively selling loans on the secondary market find that during periods of high interest rates the out-of-state secondary market dries up, resulting in the banks not being able to sell the loans, and consequently in some cases being constrained from making further loans. Also, less aggressive banks without much experience in selling loans on the secondary market may become more willing to make guaranteed loans if they knew an active, in-state secondary market existed.

In our opinion, the advantages of this program in terms of increasing lending capacity and reducing risks to lenders, and the fact that the investments carry no more risk than others currently made by the Board, far outweigh whatever drawbacks the investments may have, such as the potential for prepayment and no call protection. The program can also be easily implemented within the existing day-to-day operations of the Board of Investments.

Private/Public Economic Development Entity

Consistent legislative and administrative policies are an important contributor to increased capital formation and economic development. The State of Montana could benefit from a consistent, stable public/private organization which will act to promote sensible economic development.

Diversification of the state's economy has long been cited as a primary goal of state economic policy. It is apparent that capital formation and availability play an important role in assisting an area to achieve more balanced growth. Options suggested below to assist capital formation and provide venture capital to business require a highly professional and experienced staff to perform the functions of soliciting and screening proposals, brokering business deals and providing specialized consulting services to funded firms. The recommended development entity is the place where these functions should be performed.

The proposed Montana Development Foundation (MDF) is a private, non-profit entity that takes a public/private partnership approach to balanced and sensitive economic development. It is built on the twin premises that sustained economic growth in harmony with our physical surroundings is necessary to the long-term stability of the state and well-being of its citizens and that the private sector must play a major role in seeing that this happens.

The Foundation will attempt to assist new entrepreneurs in the establishment of new businesses, help existing businesses prosper and expand through the provision of technical assistance. It will work to attract additional commerce and industry to the state by promoting the state's attributes.

It will also assist local governments and organizations in their economic development efforts. Specifically, in the context of development finance it will provide general overhead and professional staff support services to minimize the development finance entity's operating costs, thus providing for more flexible financing options. It will provide an independent proposal screening and review capability to prevent possible biases toward investment proposals. Finally, it can act in the capacity of a broker, bringing together private venture capital firms, the state development finance entity and local entrepreneurs.

The Foundation is not a state agency, and therefore will have the flexibility necessary to hire and retain top professional staff. It will also be removed from direct political involvement in its day to day operations.

The Foundation will be controlled by a Board of Directors elected by the contributors to the Foundation. It will be funded from private and public contributions, to be matched on a one-to-one basis from an earmarked fund established by the state legislature. Thus, the state of Montana will formally be able to elect up to one-half of the members of the Board of Directors. Whether elected by the legislature or executive branch, or both, less than half of the state elected members of the Board should be from state government.

The funding sequence requires that significant private support for the Foundation be a prerequisite for its formal establishment and operation. It will obviously take sincere and effective promotion of the concept to encourage the necessary degree of private support. The state must play a major role here. We suggest that the state appropriate its 25 percent matching requirement, and use this and its FY82 EDA 302 economic planning money to fund an Organizing Committee which will commence operations in July, 1981. This committee will have the responsibility to work diligently for one year soliciting support for the Foundation. After this year, the feasibility of the concept will be fully assessed and a "go" or "no go" decision will be made. In no event will the legislature's one-to-one match set aside be expended until this assessment is made, the feasibility proven, and a formal Board of Directors elected and Corporate By-Laws adopted.

Since it is non-profit, the MDF will continually be faced with the problem of financing its operations. It will definitely need to develop a strong track record if it expects to recieve annual, repeat contributions, from either the private sector or the state. Of course, it may also explore the eventual possibility of some fee-for-service arrangements.

Both the MDF, and the following recommended Montana Development Finance Corporation, are private corporations assisted by partial funding from the state. Based on our brief research there appear to be two constitutional provisions affecting the proposed financing. Article V, Section 11 of the constitution states the following; "No appropriation shall be made..to any... private corporation." This will require that the appropriation, or authorization to spend bond proceeds, be given to an existing agency, such as the Office of Budget and Program Planning, or to a new entity, such as a Board of Development Finance. In this manner the appropriation would be made "to" a government entity, not the private sector. From this point on the program would operate, for example, similar to the DNRC renewable resources program or Board of Housing.

Article VIII, Section 13 states that "Except for monies contributed to retirement funds, no public funds shall be invested in private corporate capital stock." Clearly, this requires that the state not acquire any ownership (equity) in the MDF, in return for its providing partial funding.

Synopsis

Program: Montana Development Foundation

Purpose: To encourage economic development and diversification, and provide administrative and technical support to the development finance entity.

Organization: Private, non-profit.

Governance: Board of Directors elected by contributors.

Implementation: Organizing Committee funded by state to work for 12 months testing the concept and soliciting support from the private sector. A "go" or "no go" decision will then be made. Legislative action necessary for match.

Funding: Year 1 - Organizing Committee funded by state 25% match and EDA 302 planning money.

Year 2 forward - Contributions from private sector and government entities, matched one-for-one from earmarked fund established by state legislature.

Legal Issues: See page 113.

Fiscal Note

Program: Montana Development Foundation

Estimated Costs:

1. Year 1 - $40,000 for Organizing Committee (EDA 302 match).
2. Operating budget match for private contributions, $250,000/yr.

Estimated Revenues:

Unknown

Option A: Montana Development Finance Corporation

The Montana Development Finance Corporation (MDFC) is a private, for-profit corporation which acts as a Montana-based venture capital company. Similar to the MDF, it is designed to operate in the private sector and require support of the private sector.

The MDFC will be financed partially through the sale of corporate stock to investors (private, corporate, or trust). The state will act in two ways to assist in this financing. First, it will provide a tax credit incentive to Montana purchasers of MDFC stock by guaranteeing them an annual state income tax credit over the following five years equal to 15 percent of their investment, or a total credit of 75 percent of their investment. Essentially, only one of every four dollars invested in the corporation will represent a net cash outlay to the investor. A limit may be placed on the credits' percent of the tax liability for any single year, but unused credits may be carried forward.

Second, the state legislature will match, on a one-for-one basis, each dollar raised through the sale of stock, up to a maximum of $10,000,000. This can be financed either through the sale of a bond, repaid with either interest from the coal tax trust fund, or coal severance tax and oil and gas revenues, or through a direct appropriation from an ear-

marked account, such as the coal severance tax, or the general fund. A direct appropriation seems unlikely, given current budgetary constraints.

The state funding is needed to allow the MDFC to fulfill its primary responsibility of supplying equity capital. As we noted earlier, equity capital can take many forms, but one of the most important is that it does not usually carry any regular repayment schedules. It thus requires that the party supplying it also not be faced with regular repayments on the money it is supplying. What will the state then gain in return for this $10,000,000?

First, it will hopefully result in increased economic activity. In addition to this the state may arrange for delayed repayment of the seed money, a share of the earnings of MDFC, or a combination of both. For example, the state can consider the $10,000,000 appropriated to the MDFC as a 30-year debenture, with a 5 or 10 year grace period in which no payments on either principal or interest will be made. At the end of this period, regular repayments of principal and accrued interest will be made. The state can also share in the earnings of MDFC.

The state will also have to ensure that the MDFC meet certain simple criteria in terms of putting its assets to work, and not invest unduly in such instruments as Treasury

Bills. Finally, the executive branch will have the right to appoint a minority share of the Board of Directors.

Like the MDF, it will take a year or so to see if this concept is viable. We feel that the same approach used there can be used here. The state should establish and fund an Organizing Committee to spend a year, or more, soliciting and encouraging private support for the MDFC. After this gestation period, the feasibility of the approach can be reassessed. If feasible, the necessary Board and By-Laws can be established, and formal fund raising can begin. Of course, the state match will only be made once formal fund raising is begun.

The MDFC will be free to use all forms of financing instruments, including long-term loans, straight equity, royalties, preferred and convertible debentures, etc. What instruments are used will be jointly negotiated to meet the needs of the recipient firm and MDFC. Its ability to use non-debt instruments will be constrained by the annual returns required by the stockholders and the state. Its operating budget needs should be minimized since it will be able to share MDF staff and overhead.

If desired, the MDFC may wish to become a licensed SBIC, and thus be eligible for up to a 4:1 match from the

federal government at rates near the "prime" lending rate. While this would greatly increase the assets of the corporation, the uses to which this loan money could be put would be more in the debt-type area, because of the need to continually meet repayment schedules.

The ability of MDFC to, in the short-run, serve real equity capital needs will be dependent on required returns to stockholders and the state. Overall professional management and competent investment decisions will be necessary if the MDFC is to succeed in the long run. The ability of the entity to operate in a business-like manner may benefit from its being in the private sector.

The legal issues mentioned in the context of the MDF, page 113, also apply to the MDFC. It will apparently be necessary for the state to find a conduit for the state match satisfying the restriction against appropriating funds directly to a private company. The state will be unable to purchase any equity in the MDFC in return for its funding. This is not a problem since the contractual relationship between the state and the MDFC can specify how the state will recover its investment.

An alternative to appropriating the funds to a state agency involves channeling the money through local development corporations to the private sector. In Montana, LDC's have in the past used various forms of financing to assist businesses, such as loan guarantees, interest subsidies and the purchase of equity. Their funding has always been through the sale of stock locally, or federal programs such as the Economic Development Administration, Old West Regional Commission, and Housing and Urban Development, etc. They have never, to our knowledge, been the recipient of a direct appropriation, or any state funds for that matter. This is probably because of their erratic track record, and budgetary constraints at the state level. In our judgment the legislature would not be very receptive to funding the LDC's for a development finance effort. Some other local or regional organizations could be established, but it may prove difficult to do so and satisfy all the various interest groups.

There is some question whether the Montana constitution, or state laws, prohibit the issuance of g.o. bonds to raise money which is eventually relent to a private company. This cannot be done in thirty-six states. If so, revenue bonds - not requiring the "full faith and credit" of the state - may be an alternative. We suggest that this be more fully explored.

Synopsis

Program: Montana Development Finance Corporation.

Purpose: To supply needed capital to creditworthy Montana businesses.

Organization: Private, for-profit

Governance: Board of Directors, elected by stockholders; minority share appointed by Governor.

Implementation: Organizing Committee funded by state to work for twelve months soliciting support. If feasible, incorporation and formal fund raising will then take place. Legislative action necessary for match and proposed tax credits.

Funding: Year 1 - Organizing Committee funded by state 25% match and EDA 302 planning money.

Year 2 forward - Stock purchased by private sector, matched one-for-one by state legislative appropriation or through the sale of a bond. After this, MDFC is to be self-sustaining. Match is to be treated as a debenture, with state receiving regular, although delayed, repayments and, perhaps a share of the earnings of MDFC.

Legal Issues: Pages 119 and 120.

Fiscal Note

Program: Montana Development Finance Corporation

Estimated Costs: *

1. Year 1 - $40,000 for Organizing Committee (EDA 302 match).

2. Repayment of $2,500,000 bond issuance @ 8% @ 20 years, as match for private stock purchases.

   $250,000/yr
   (20 years)

3. Revenue losses due to tax credit given to purchasers of stock.

   $375,000/yr
   (5 years)

Estimated Revenues:

1. Proceeds of loan to MDFC, 2,250,000 @ 9% @ 30 years, with 5 year grace period on interest and 10 year grace period on principal.

   $200,000/yr
   (5th year-10th year)

   $240,000/yr
   (10th year - 30th year)

2. Proceeds from investing $250,000 reserve fund.

   $27,500/yr
   (20 years)

3. Personal income tax revenues paid by new employment generated by new capital investment. **

   $40,000/yr

4. Share of earnings of MDFC. ***

$90,000/yr
(year 6 forward)

* Assume total program of $5,000,000, state match of $2,500,000.

** Assumes net new investment in plant and equipment of $3,600,000 or 80% of total new capital investment; 72 new jobs (@ $50,000 of investment required for each new job); $14,380 annual income per each job; and 3.2 percent of annual income paid to state for personal income taxes.

*** Assumes average return to state of 2½% of gross investment of MDFC beginning in year 6.

Option B: Montana Development Finance Agency

Some may argue that if the state feels it is in its best interest to establish a development finance entity, then it ought to play a more direct role and operate the entity itself. Also, this option would avoid the necessity of relying on private financial support to get the operation going. It may simply be extremely difficult to generate even a $1,000,000 stock sale to the private sector. A two phase approach is also possible, with Option A first tried and, if unsuccessful, then Option B.

The public agency approach would result in the creation of a Montana Development Finance Agency (MDFA), whose structure would be similar to that of the Board of Investments. It would be an independent entity governed by a Board appointed by the Governor and confirmed by the legislature. Its general objective would be to promote sensible business growth through providing necessary financing to creditworthy entrepreneurs and firms who would not otherwise receive financing. The emphasis would be on the use of nondebt instruments.

The MDFA could be financed through either the receipt of a one-time grant of principal, from the general fund or an earmarked account, or on an "as needed" basis through the

sale of "umbrella" revenue bonds. In the former case the appropriation would be considered as a revolving fund, requiring that either investments generate early repayment or that relatively more debt-like instruments be used. In the latter case the bonds would be sold after potential recipient firms were screened and assembled into a "package," and could be repaid from interest from the coal tax trust fund, the general fund, or coal, oil or gas severance tax revenues. The latter financing option would give the MDFA much more flexibility in making equity type loans, constrained only by the continued acceptance of the offerings by the bond market.

Each of the two sources of funds appears to require the use of certain financing instruments. Because of the desired emphasis on equity-type financings, the latter funding source would appear to best meet the programs objectives. While the "grant of principal" approach may encourage more prudent and cautious investment decisions, because of the self-sustaining nature of the revolving fund, the latter may allow for more of the needed "risk-taking." Also, the ability of the legislature to take away bonding authority or revenue backing, or the public marketplace to reject the bonds, will act to encourage responsible investment decision-making.

The sources of MDFA funding will largely determine the mix of financing instruments used. All of the various financing instruments should be available for its use, including equity, royalties, various forms of debt, etc. The agency could also provide loan guarantees in cases where they might be instrumental in assisting a firm to receive a conventional loan. In specialized applications, funding for technical assistance could be provided. Similar to other state equity intermediaries, the MDFA should in no case acquire more than 49 percent of a firms stock. Since equity is the emphasis, debt financing should be used sparingly and only in cases where it would not jeopardize the recipient firms ability to prosper. Limits, either a dollar amount or a percent of MDFA's assets, should be set for individual financings. Priority should be given in cases where the receipt of MDFA financing will act to directly assist the firm in receiving other outside funding.

Certain problem areas exist when a development finance entity is situated wholly in the public sector. The need for a thoroughly professional staff, and commensurate salary and benefits packages, will require that the staff be unclassified and outside the restrictions of the state pay plan. However, there should be few staff positions of this sort since the MDFA may be able to rely heavily on the staff of the above mentioned MDF. MDFA investment decisions

should, of course, be outside the influence of politics and, therefore, the selection of top level staff and Board members must be made through a clearly bipartisan approach.

This option presents legal issues which have not been resolved. The legislative statute giving the Board of Investments sole authority to invest state funds will obviously have to be modified. The constitutional provision prohibiting the investment of public funds, except retirement funds, in common stock may have to be changed through a vote of the people. If necessary, this may be a particularly thorny problem. Finally, because of the basic institutional objectives of the Board of Investments, and the myriad of statutory, regulatory and quasi-legal restrictions on its actions, the Board of Investments should have no involvement in the proposed finance program.

Synopsis

Program:	Montana Development Finance Agency
Purpose:	To supply needed capital to creditworthy Montana businesses.
Organization:	Public Agency.
Governance:	Board appointed by the Governor, confirmed by the legislature.
Implementation:	Legislative action necessary for establishment of entity and appropriation to repay bonds.
Funding:	Sale of 'umbrella" revenue bonds on "as needed" basis, repaid from interest from coal tax trust fund, or coal, oil or gas mineral severance tax revenues.
Legal Issues:	See page 127.

Fiscal Note

Program: Montana Development Finance Agency

Estimated Costs: *

1. Repayment of 5,000,000 bond issuance @ 8% @ 20 years.

   $550,000/yr
   (20 years)

2. Agency operating budget.

   $250,000/yr

Estmated Revenues:

1. Proceeds of investing $4,500,000 in Montana businesses. **

   $96,000/yr
   (20 years)

   $180,000/yr
   (year 6 forward)

2. Personal imcome tax revenues paid by new employment generated by new capital investment. ***

   $40,000/yr

* Assumes total program of $5,000,000.

** Assumes 20 percent, or $900,000 is in form of debt @ 9% @ 20 years; and average return of 5% per year on remaining capital invested, beginning in year 6.

*** Assumes net new investment in plant and equipment of $2,600,000 or 80% of total new capital investment; 72 new jobs (@ $50,000 of investment required for each new job); $14,380 annual income per each job; and 3.2 percent of annual income paid to state for personal income taxes.